

Utah Greater Sage-Grouse Approved Resource Management Plan Amendment

Attachment 4

**From the USDI 2015 Record of Decision and Approved Resource Management Plan
Amendments for the Great Basin Region including the Greater Sage-Grouse Sub-Regions
of: Idaho and Southwestern Montana, Nevada and Northeastern California, Oregon, and
Utah**

Prepared by
US Department of the Interior
Bureau of Land Management
Utah State Office

September 2015



MISSION STATEMENT

The BLM manages more than 245 million acres of public land, the most of any Federal agency. This land, known as the National System of Public Lands, is primarily located in 12 Western states, including Alaska.

The BLM also administers 700 million acres of sub-surface mineral estate throughout the nation. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under our mandate of multiple-use and sustained yield. In Fiscal Year 2014, the BLM generated \$5.2 billion in receipts from public lands.

DOI-BLM-UT-9100-2013-0002-EIS

State Director Recommendation for Approval

I hereby recommend for approval the Utah Greater Sage-Grouse Resource Management Plan Amendment.



Jenna Whitlock, Acting Utah State Director

Date

9/15/2015

This page intentionally left blank.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	I-1
1.1 Description of the Utah Sub-Regional Planning Area	I-1
1.2 Purpose and Need.....	I-8
1.3 Utah Subregional GRSG Conservation Summary.....	I-9
1.4 Planning Criteria.....	I-13
2. APPROVED RESOURCE MANAGEMENT PLAN AMENDMENT	2-1
2.1 Approved Resource Management Plan Amendment Instructions	2-1
2.2 Goals, Objectives, and Management Actions.....	2-2
2.2.1 Special Status Species (SSS)	2-3
2.2.2 Vegetation (VEG)	2-15
2.2.3 Fire and Fuels Management (FIRE)	2-18
2.2.4 Livestock Grazing/Range Management (LG)	2-21
2.2.5 Wild Horses and Burros (WHB)	2-24
2.2.6 Minerals Resources (MR).....	2-25
2.2.7 Renewable Energy (Wind and Solar) (RE)	2-31
2.2.8 Lands and Realty (LR)	2-32
2.2.9 Recreation (REC).....	2-35
2.2.10 Travel and Transportation Management (TTM)	2-36
3. CONSULTATION, COORDINATION, AND PUBLIC INVOLVEMENT	3-1
3.1 Consultation and Coordination	3-1
3.1.1 Section 7 Consultation	3-1
3.1.2 NHPA Section 106 Consultation.....	3-2
3.1.3 American Indian Tribal Consultation	3-2
3.2 Public Involvement.....	3-3
4. PLAN IMPLEMENTATION	4-1
4.1 Implementing the Plan	4-1
4.2 Maintaining the Plan.....	4-2
4.3 Changing the Plan	4-2
4.4 Plan Evaluation, Monitoring, and Adaptive Management.....	4-2
5. GLOSSARY	5-1
6. REFERENCES	6-1

TABLES		Page
I-1	Land Management in the Utah Subregional Planning Area	I-5
I-2	Acres of PHMA and GHMA in the Decision Area for the ARMPA.....	I-5
I-3	Acres of GRSG Habitat Management Area by County in the Decision Area (BLM-Administered Lands Only)	I-7
I-4	Acres of GRSG Habitat Management Area by BLM Field Office in the Decision Area (BLM-Administered Lands Only)	I-8
I-5	Threats to GRSG in the Utah Subregion as identified by the COT	I-10
I-6	Key Components of the Utah Subregion ARMPA Addressing COT Report Threats.....	I-10
2-1	Summary of Allocation Decisions by GRSG Habitat Management Areas.....	2-3
2-2	Habitat Objectives for Greater Sage-Grouse	2-4

FIGURES		Page
I-1	Utah Planning Area, Surface Management and Subsurface Estate.....	I-2
I-2	Utah Planning Area, Greater Sage-Grouse Habitat Management Areas across All Jurisdictions	I-3
I-3	Utah Decision Area, Greater Sage-Grouse Habitat Management Areas for BLM Administered Lands	I-4

Appendix A (Figures 2-1 through 2-13):

- 2-1 Habitat Management Areas
- 2-2 GRSG Biologically Significant Units and Priority Habitat Management Areas
- 2-3 Livestock Grazing
- 2-4 Fluid Minerals (Oil and Gas)
- 2-5 Locatable Minerals
- 2-6 Salable Minerals (Mineral Materials)
- 2-7 Non-Energy Leasable Minerals
- 2-8 Wind
- 2-9 Solar
- 2-10 Designated Utility Corridors
- 2-11 Rights-of-Way
- 2-12 Land Tenure
- 2-13 Trails and Travel Management

APPENDICES

- A Approved RMP Amendment Maps
- B Applying Lek Buffer Distances
- C Required Design Features
- D Greater Sage-Grouse Monitoring Framework
- E Greater Sage-Grouse Disturbance Cap Guidance
- F Mitigation Strategy: Utah Greater Sage-Grouse RMPA
- G Stipulations Associated with Fluid Mineral Leasing
- H Fire and Invasives Assessment Tool
- I Adaptive Management
- J Biological Opinion
- K Greater Sage-Grouse Habitat Baseline and Habitat Update Protocol

ACRONYMS AND ABBREVIATIONS

Full Phrase

ARMPA	Approved Resource Management Plan Amendment
AUM	animal unit month
BLM	United States Department of the Interior, Bureau of Land Management
BMP	best management practice
BSU	biologically significant unit
CFR	Code of Federal Regulations
cm	centimeter
COT	Conservation Objectives Team
CSU	controlled surface use
EIS	environmental impact statement
ESA	Endangered Species Act of 1973
FLPMA	Federal Land Policy and Management Act of 1976
Forest Service	United States Department of Agriculture, Forest Service
GHMA	general habitat management area(s)
GRSG	Greater Sage-Grouse
HMA	herd management area
LUP	land use plan
LUPA	land use plan amendment
MZ	management zone
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act
NRCS	United States Department of Agriculture, Natural Resources Conservation Service
NSO	no surface occupancy
OHV	off-highway vehicle
PAC	priority area for conservation
PHMA	priority habitat management area(s)
RDF	required design feature
RMP	resource management plan
RMPA	resource management plan amendment
ROD	record of decision
ROW	right-of-way
SFA	sagebrush focal area(s)
SGMA	sage-grouse management area(s)
SITLA	State of Utah School and Institutional Trust Lands Administration
SRP	special recreation permit
TL	timing limitation
USC	United States Code
USFWS	United States Department of the Interior, Fish and Wildlife Service
WAFWA	Western Association of Fish and Wildlife Agencies
WSA	wilderness study area

CHAPTER I

INTRODUCTION

The Federal Land Policy and Management Act of 1976 (FLPMA) directs the US Department of the Interior, Bureau of Land Management (BLM) to develop and periodically revise or amend its resource management plans (RMPs), which guide management of BLM-administered lands.

This Approved Resource Management Plan Amendment (ARMPA) is the result of the March 2010 US Fish and Wildlife Service (USFWS) 12-Month Finding for Petitions to List the Greater Sage-Grouse (*Centrocercus urophasianus*) as Threatened or Endangered (75 FR 13910, March 23, 2010; USFWS 2010). In that finding, the USFWS concluded that the Greater Sage-Grouse (GRSG) was “warranted, but precluded” for listing as a threatened or endangered species.

The USFWS reviewed the status of and threats to the GRSG in relation to the five listing factors provided in Section 4(a)(1) of the Endangered Species Act (ESA). The USFWS determined that Factor A, “the present or threatened destruction, modification, or curtailment of the habitat or range of the GRSG,” and Factor D, “the inadequacy of existing regulatory mechanisms,” posed “a significant threat to the GRSG now and in the foreseeable future” (USFWS 2010). The USFWS identified the principal regulatory mechanisms for the BLM as conservation measures in resource management plans (RMPs).

I.1 DESCRIPTION OF THE UTAH SUB-REGIONAL PLANNING AREA

The ARMPA planning area boundary includes all lands regardless of jurisdiction (see **Figure I-1**, Utah Planning Area, Surface Management and Sub-surface Estate, and **Figure I-2**, Utah Planning Area, Greater Sage-Grouse Habitat Management Areas across All Jurisdictions). **Table I-1**, Land Management in the Utah Subregional Planning Area, outlines the amount of surface acres that are administered by specific federal agencies, states, and local governments and lands that are privately owned in the planning area. The planning area includes other BLM-administered lands that are not allocated as GRSG habitat management areas. This ARMPA does not establish any additional management for most of these lands, which will generally continue to be managed according to their existing, underlying land use plans.

The decision area for the ARMPA is BLM-administered lands in GRSG habitat management areas (see **Figure I-3**, Utah Decision Area, Greater Sage-Grouse Habitat Management Areas for BLM Administered Lands), including surface and split-estate lands with BLM subsurface mineral rights. Any

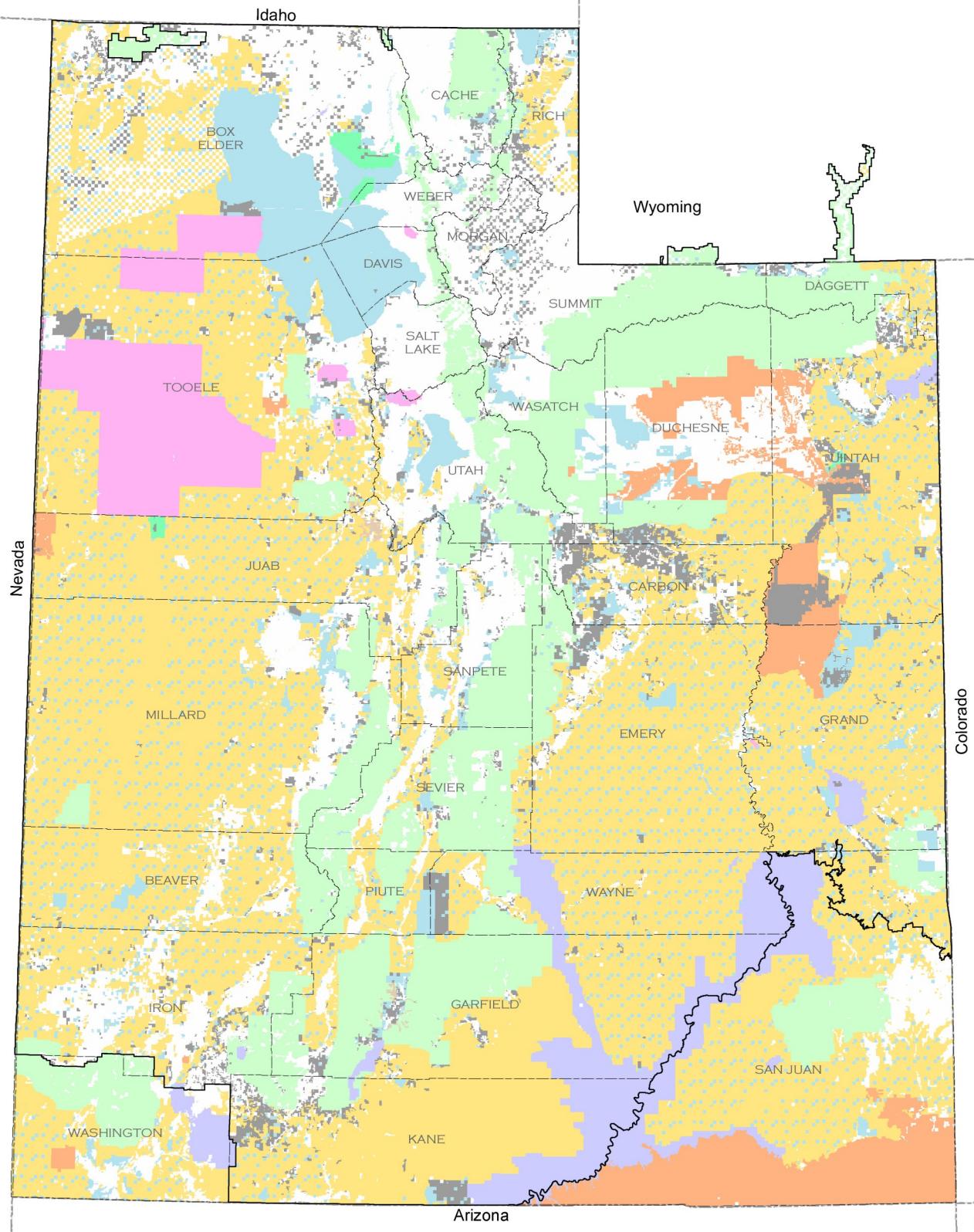
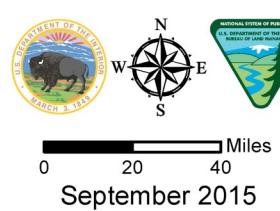


Figure 1-1: Utah Planning Area, Surface Management and Sub-Surface Estate

Bureau of Land Management	US Fish & Wildlife	Non Federal Surface, Federal Sub-surface
National Park Service	Department of Defense	Planning Area Boundary
US Forest Service	Other Federal	State Boundary
Indian Reservation	State/Local	County Boundary
	Private/Other	



No warranty is made by the Bureau of Land Management (BLM). The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.

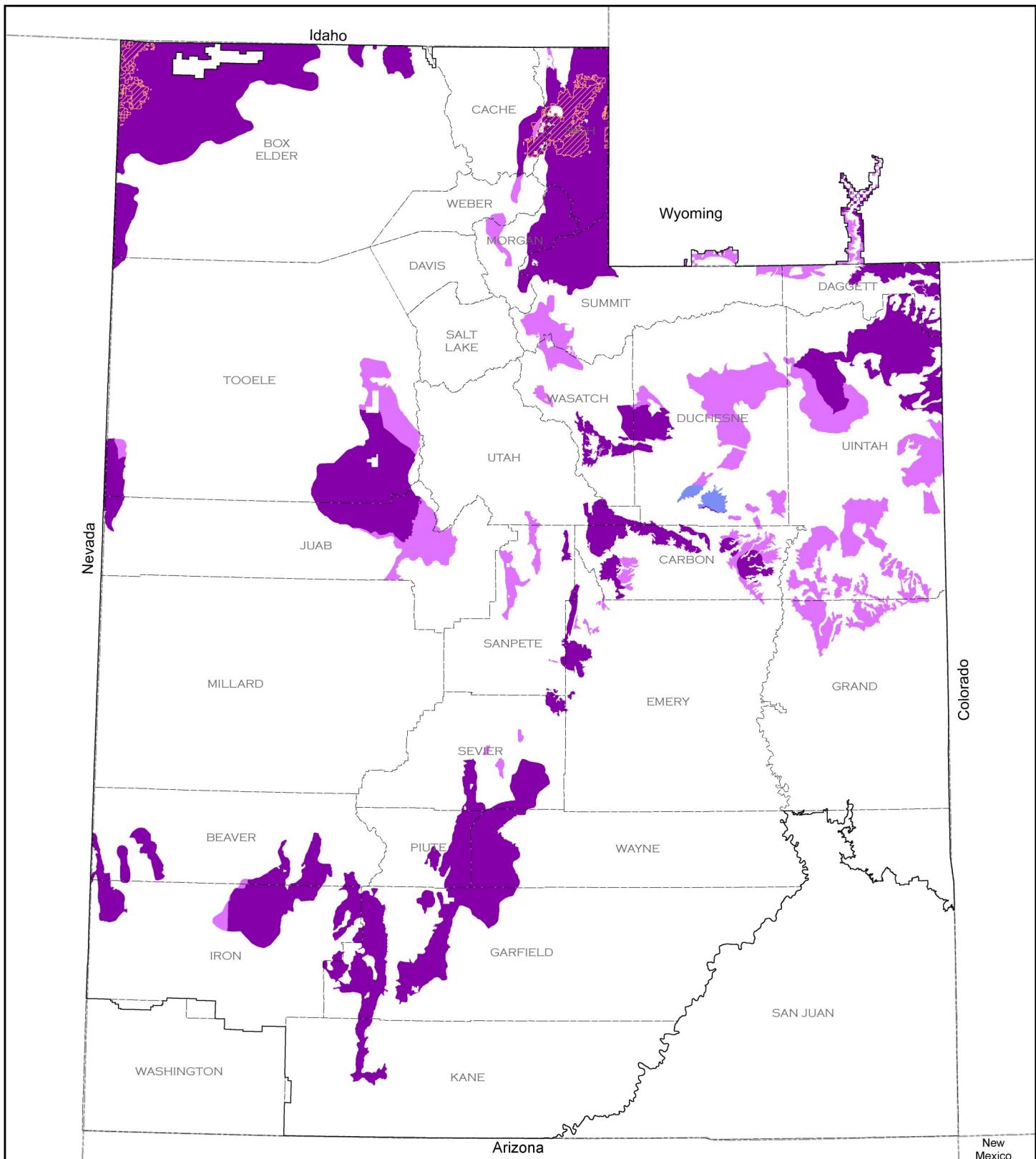
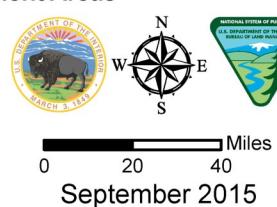


Figure 1-2: Utah Planning Area, Greater Sage-Grouse Habitat Management Areas across All Jurisdictions

Sagebrush Focal Areas (SFA)	Planning Area Boundary
Priority Habitat Management Areas (PHMA)	State Boundary
General Habitat Management Areas (GHMA)	County Boundary
Anthro Mountain (AM)	



Map Area



No warranty is made by the Bureau of Land Management (BLM). The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.

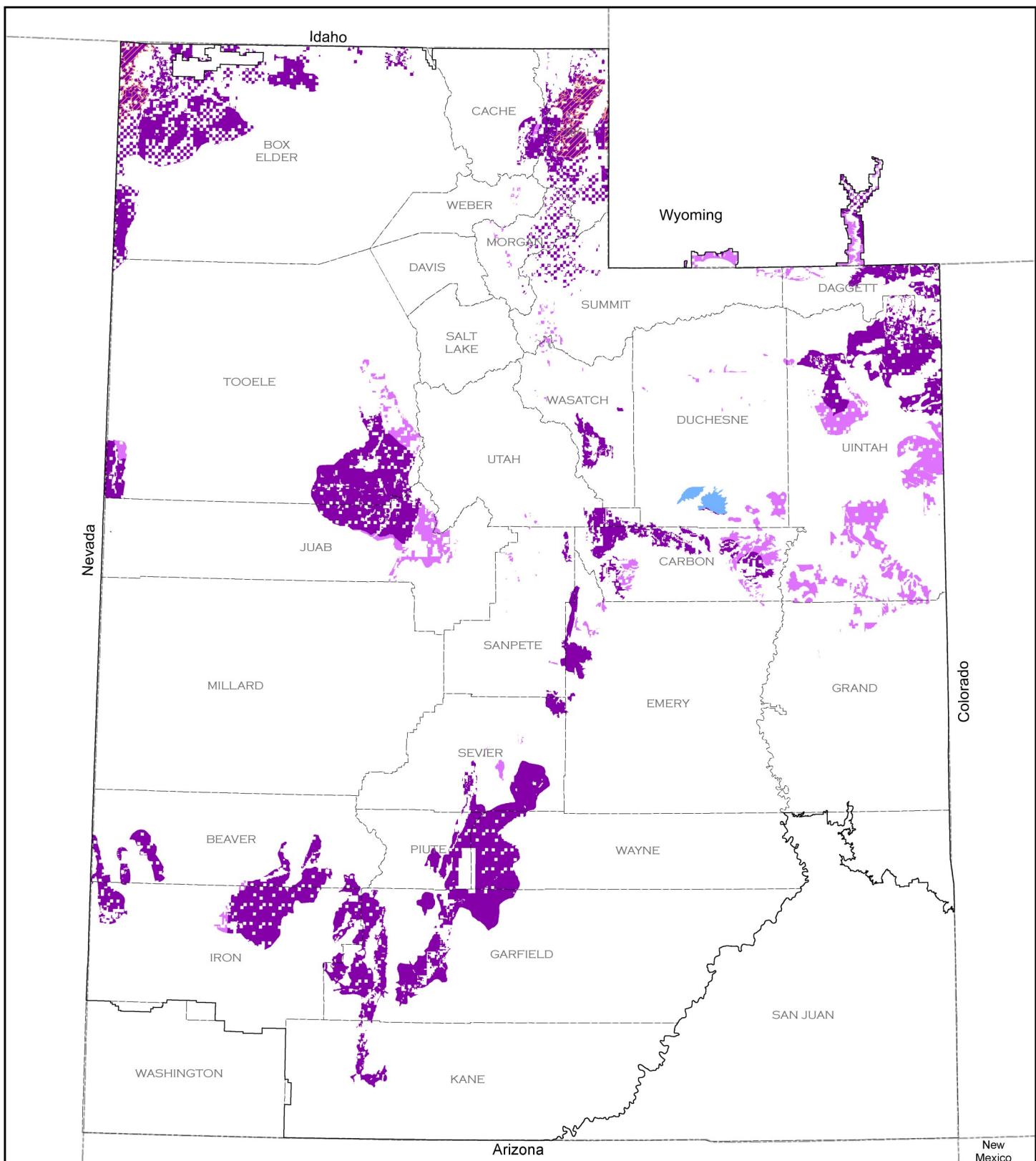
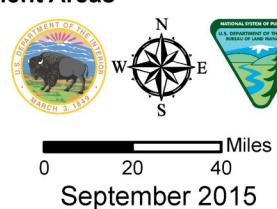


Figure 1-3: Utah Decision Area, Greater Sage-Grouse Habitat Management Areas for BLM Administered Lands

Sagebrush Focal Areas (SFA)	Planning Area Boundary
Priority Habitat Management Areas (PHMA)	State Boundary
General Habitat Management Areas (GHMA)	County Boundary
Anthro Mountain (AM)	



Map Area



No warranty is made by the Bureau of Land Management (BLM). The accuracy, reliability, or completeness of these data for individual use or aggregate use with other data is not guaranteed.

Table I-1
Land Management in the Utah Subregional Planning Area

Surface Land Management	Total Surface Land Management Acres
BLM	20,387,200
Forest Service	7,396,300
Private	10,818,200
Indian reservation	1,140,000
USFWS	121,900
Other	30,400
State	5,137,200
National Park Service	1,365,600
Other federal	0
Bureau of Reclamation	800
Local government	0
Department of Defense	1,812,300
Total acres	48,209,900

Source: BLM GIS 2015

decisions in the ARMPA apply only to BLM-administered lands, including split-estate lands within GRSG habitat management areas (the decision area). These decisions are limited to providing land use planning direction specific to conserving GRSG and its habitat.

GRSG habitat on BLM-administered lands in the decision area consists of lands allocated as priority habitat management areas (PHMA) and general habitat management areas (GHMA; see **Table I-2**).

Table I-2
Acres of PHMA and GHMA in the Decision Area for the ARMPA

	PHMA	GHMA
BLM-administered surface	2,026,400	502,500
BLM-administered mineral estate*	1,297,400	225,000

Source: BLM GIS 2015

*Acreage where the surface and mineral estates are owned or administered by separate entities. These acres show where the surface estate is not BLM administered (e.g., private, state, tribal, and US Department of Agriculture, Forest Service) but that have a federal mineral estate administered by the BLM. There are an additional 41,200 acres of National Forest System lands in the Anthro Mountain portion of the Carbon Population Area that would be managed as neither PHMA nor GHMA. These areas would be identified as “Anthro Mountain.” In the BLM’s ARMPA, these areas are considered split-estate, where the BLM administers the mineral estate.

PHMA and GHMA are defined as follows:

- PHMA—BLM-administered lands identified as having the highest value to maintaining sustainable GRSG populations. Areas of PHMA largely coincide with areas identified as priority areas for conservation (PACs) in the USFWS’s Conservation Objectives Team

(COT) Report. These areas include breeding, late brood-rearing, winter concentration areas, and migration or connectivity corridors.

- GHMA—BLM-administered lands where some special management will apply to sustain GRSG populations. Areas of occupied seasonal or year-round habitat outside of PHMA.

The ARMPA also identifies specific sagebrush focal areas (SFA), which is a subset of PHMA (see **Figure I-3**). SFA were derived from GRSG stronghold areas described by the USFWS in a memorandum to the BLM titled Greater Sage-Grouse: Additional Recommendations to Refine Land Use Allocations in Highly Important Landscapes (USFWS 2014). The memorandum and associated maps provided by the USFWS identify areas that represent recognized strongholds for GRSG that have been noted and referenced as having the highest densities of GRSG and other criteria important for the persistence of the species.

PHMA (including SFA) and GHMA on BLM-administered lands in the decision area fall within 24 counties in Utah (see **Table I-3**, Acres of GRSG Habitat Management Area by County in the Decision Area (BLM-Administered Lands Only)). The habitat management areas also span nine BLM Utah field offices (see **Table I-4**, Acres of GRSG Habitat Management Area by BLM Field Office in the Decision Area (BLM-Administered Lands Only)).

The Cedar City, Fillmore, Kanab, Price, Richfield, Salt Lake, and Vernal Field Offices and the Grand Staircase-Escalante National Monument administer the 14 pertinent RMPs being amended by this ARMPA.

The following BLM RMPs are hereby amended to incorporate appropriate GRSG conservation measures:

- Vernal Resource Management Plan (2008)
- Price Resource Management Plan (2008)
- Richfield Resource Management Plan (2008)
- Kanab Resource Management Plan (2008)
- Grand Staircase-Escalante National Monument Management Plan (2000)
- Cedar/Beaver/Garfield/Antimony Resource Management Plan (1986)
- Pinyon Management Framework Plan (1978)
- Warm Springs Resource Management Plan (1987)
- House Range Resource Management Plan (1987)
- Pony Express Resource Management Plan (1990)
- Box Elder Resource Management Plan (1986)
- Randolph Management Framework Plan (1980)
- Park City Management Framework Plan (1975)
- Salt Lake District Isolated Tracts Planning Analysis (1985)

Table I-3
Acres of GRSG Habitat Management Area by County in the Decision Area (BLM-Administered Lands Only)

County Name ¹	ARMPA					
	PHMA		GHMA		TOTAL	
	Surface Estate ²	Mineral Estate ³	Surface Estate ²	Mineral Estate ³	Surface Estate ²	Mineral Estate ³
Beaver	149,800	6,800	1,200	0	151,000	6,800
Box Elder	437,600	111,800	0	0	437,600	111,800
Cache	0	43,700	0	3,500	0	47,200
Carbon	40,300	89,200	52,600	16,400	92,900	105,600
Daggett	57,000	27,300	0	7,800	57,000	35,100
Duchesne ⁴	1,100	2,700	28,600	7,200	29,700	9,900
Emery	100	57,400	0	8,800	100	66,200
Garfield	134,200	250,800	0	0	134,200	250,800
Grand	0	0	14,100	4,400	14,100	4,400
Iron	249,800	28,600	7,100	1,200	256,900	29,800
Juab	139,300	5,700	73,600	11,600	212,900	17,300
Kane	22,900	8,600	0	0	22,900	8,600
Morgan	0	29,900	0	3,000	0	32,900
Piute	58,400	17,700	0	0	58,400	17,700
Rich	166,600	78,400	0	400	166,600	78,800
Sanpete	0	16,700	1,600	1,700	1,600	18,400
Sevier	15,500	116,600	0	7,500	15,500	124,100
Summit	300	26,400	50	11,400	350	37,800
Tooele	237,500	105,700	41,500	8,100	279,000	113,800
Uintah	206,200	113,500	280,100	71,500	486,300	185,000
Utah	2,000	25,700	1,800	2,500	3,800	28,200
Wasatch	0	40,900	250	4,300	250	45,200
Wayne	107,800	68,500	0	0	107,800	68,500
Weber	0	0	0	1,700	0	1,700
Sweetwater (WY)	0	23,700	0	31,100	0	54,800
Uinta (WY)	0	1,100	0	20,900	0	22,000
Grand Total	2,026,400	1,297,400	502,500	225,000	2,528,900	1,522,400

Source: BLM GIS 2015

¹The following counties in the planning area do not contain mapped occupied GRSG habitat: Salt Lake, Davis, and Millard.

²Acreage within PHMA/GHMA where the BLM has managerial authority on the surface estate.

³Acreage where the surface and mineral estates are owned or administered by separate entities. These acres show where the surface estate is not BLM administered (e.g., private, state, tribal, and Forest Service) but that have a federal mineral estate administered by the BLM.

⁴The 41,200 acres of National Forest System lands in the Anthro Mountain area would be managed as neither PHMA nor GHMA. These areas would be identified as "Anthro Mountain." In the BLM's RMPA, these areas are considered split-estate, where the BLM administers the mineral estate.

Table I-4
Acres of GRSG Habitat Management Area by BLM Field Office in the Decision Area
(BLM-Administered Lands Only)

BLM Office	ARMPA					
	PHMA		GHMA		TOTAL	
	Surface Estate ¹	Mineral Estate ²	Surface Estate ¹	Mineral Estate ²	Surface Estate ¹	Mineral Estate ²
Cedar City	396,100	35,400	8,300	1,200	404,400	36,600
Fillmore	139,300	5,700	73,600	11,600	212,900	17,300
Grand Staircase-Escalante National Monument	5,800	0	0	0	5,800	0
Kanab	122,800	259,200	0	0	122,800	259,200
Moab	0	0	14,100	4,400	14,100	4,400
Price	40,400	146,600	52,700	25,200	93,100	171,800
Richfield	213,700	219,600	1,500	9,200	215,200	228,800
Salt Lake	844,000	462,700	43,600	34,800	887,600	497,500
Vernal ³	264,300	143,400	308,700	86,600	573,000	230,000
National Forest System lands in Wyoming	0	24,800		52,000	0	76,800
Grand Total	2,026,400	1,297,400	502,500	225,000	2,528,900	1,522,400

Source: BLM GIS 2015

¹Acreage within PHMA/GHMA where the BLM has managerial authority on the surface estate.

²Acreage where the surface and mineral estates are owned or administered by separate entities. These acres show where the surface estate is not BLM administered (e.g., private, state, tribal, and Forest Service) but that have a federal mineral estate administered by the BLM.

³The 41,200 acres of National Forest System lands in the Anthro Mountain area would be managed as neither PHMA nor GHMA. These areas would be identified as “Anthro Mountain.” In the BLM’s RMPA, these areas are considered split-estate, where the BLM administers the mineral estate.

1.2 PURPOSE AND NEED

The BLM has prepared this ARMPA with an associated environmental impact statement (EIS) to amend RMPs for BLM field offices containing GRSG habitat. This planning process is needed to respond to the USFWS’s March 2010 “warranted, but precluded” ESA listing decision for GRSG. The USFWS identified the present or threatened destruction, modification, or curtailment of habitat or range and the inadequacy of existing regulatory mechanisms as significant threats. It also identified the principal regulatory mechanisms for the BLM as conservation measures incorporated in land use plans.

The purpose of this ARMPA is to identify and incorporate appropriate measures in existing land use plans to conserve, enhance, and restore GRSG habitat by avoiding, minimizing, or compensating for unavoidable impacts on GRSG habitat in the context of the BLM’s multiple use and sustained yield mission under FLPMA.

Changes in management of GRSG habitats are necessary to avoid the continued decline of populations across the species’ range. This ARMPA focuses on areas affected by threats to GRSG habitat identified by the USFWS in the March 2010 listing decision and in the USFWS COT Report.

The major threats to GRSG or GRSG habitat on BLM-administered lands in the Utah Subregion are the following:

- Wildland fire—Loss of large areas of GRSG habitat due to wildfire
- Invasive species—Conversion of GRSG habitat to invasive annual grass-dominated (e.g., cheatgrass) plant communities
- Conifer encroachment—Encroachment of pinyon and juniper into GRSG habitat
- Infrastructure—Fragmentation of GRSG habitat due to human development activities, such as power lines, pipelines, roads, communication sites, railroads, range improvements, and renewable energy development
- Minerals extraction—Fragmentation of GRSG habitat due to mineral exploration and development
- Grazing—Loss of habitat components due to improper livestock, wild horses and burros, and large wildlife use
- Recreation—Loss of habitat tied to cross-country motorized travel

Because the BLM administers a large portion of GRSG habitat in the affected states, changes in GRSG habitat management are anticipated to have a considerable beneficial impact on present and future GRSG populations.

I.3 UTAH SUBREGIONAL GRSG CONSERVATION SUMMARY

The ARMPA identifies and incorporates measures to conserve, enhance, and restore GRSG habitat by avoiding, minimizing, and compensating for unavoidable impacts of threats on GRSG habitat. The ARMPA addresses threats to GRSG and its habitat identified by the GRSG National Technical Team by the USFWS in the March 2010 listing decision, as well as those threats described in the USFWS's 2013 COT Report. In this report, the USFWS identified threats by GRSG population across the range and stated whether that threat is present and widespread, present but localized, or unknown for that specific population.

Table I-5 identifies the GRSG populations in the Utah Subregion. The BLM and Forest Service identified and explained additional threats in the environmental impact statements.

Table I-6 provides a crosswalk as to how the ARMPA for the Utah Subregion addresses the threats from the COT Report.

The ARMPA also identifies and incorporates measures for other uses and resources that are designed to conserve, enhance, and restore GRSG habitat. Specifically, the ARMPA requires the following summarized management actions, subject to valid existing rights:

- Increasing the quantity and quality of GRSG habitat by providing a framework for prioritizing areas in PHMA and GHMA for conifer reduction, treating areas with invasive annual grasses, and fuel breaks and hazardous fuels treatments
- Requiring specific design features for certain lands and realty uses
- Limiting disturbance through density and disturbance caps in PHMA
- Monitoring GRSG habitat quality and making adjustments in land uses as necessary to meet GRSG habitat objectives, land health standards, and ecological site potential
- Including GRSG habitat objectives in land health standards, as appropriate

Table I-5
Threats to GRSG in the Utah Subregion as identified by the COT

GRSG Identified Populations from the COT Report Applicable to the Utah Subregion	Unit Number	Isolated Small Size	Sagebrush Elimination	Agriculture Conversion	Fire	Conifers	Weeds/Annual Grasses	Energy	Mining	Infrastructure	Improper Grazing	Free-Roaming Equids	Recreation	Urbanization
Rich-Morgan-Summit	9b				Y	Y	Y	Y		Y			Y	Y
Uintah	9c				Y	Y	Y	L	Y	Y			Y	Y
Strawberry Valley	10a	Y			Y	Y	Y	Y		Y			Y	
Carbon	10b	Y			Y		Y	Y	Y	Y			Y	
Sheeprock Mountains	11	Y			Y	L	L	Y	Y	L		Y	L	
Emery	12	Y			Y	Y	Y	Y	Y	Y			Y	
Greater Parker Mountain	13a				Y	Y	Y			Y			Y	
Panguitch	13b			Y	Y	Y	Y	Y	L	Y			Y	L
Bald Hills	13c	Y		Y	Y	Y	Y	Y	Y	Y		Y	Y	Y
Ibapah	15a	Y			Y	Y	Y	Y	Y	Y		Y	Y	
Hamlin Valley	15b	Y			Y	Y	Y			Y		Y	Y	
Box Elder	26b			Y	Y	Y	Y	L	Y	Y			Y	

Source: USFWS 2013

Threats are characterized as Y = threat is present and widespread, L = threat present but localized, and U = unknown.

Table I-6
Key Components of the Utah Subregion ARMPA Addressing COT Report Threats

Threats to GRSG and Its Habitat (from COT Report)	Key Component of the Utah Subregion ARMPA
All threats	<ul style="list-style-type: none"> Implement the adaptive management plan, which allows for more restrictive land use allocations and management actions to be implemented if habitat or population hard triggers are met. Require and ensure mitigation that provides a net conservation gain to GRSG for actions that result in habitat loss and degradation. Monitor implementation and effectiveness of conservation measures in GRSG habitats according to the habitat assessment framework.
All development threats, including mining, infrastructure, and energy development	<ul style="list-style-type: none"> PHMA—Apply a human disturbance cap of 3 percent within the population areas (PHMA within population areas referred to as biologically significant units [BSUs] when coordinating with other states) and proposed project analysis areas. PHMA Implement a density cap of an average of 1 energy and mining facility per 640 acres.

Table I-6
Key Components of the Utah Subregion ARMPA Addressing COT Report Threats

Threats to GRSG and Its Habitat (from COT Report)	Key Component of the Utah Subregion ARMPA
	<ul style="list-style-type: none"> • Apply buffers necessary based on project type and location to address impacts on leks when authorizing actions in GRSG habitat. • Apply required design features (RDFs) when authorizing actions in GRSG habitat. • Minimize the effects of infrastructure projects, including siting, using the best available science, updated as monitoring information on current infrastructure projects becomes available.
Energy development—fluid minerals	<ul style="list-style-type: none"> • PHMA—Open to fluid mineral leasing, subject to no surface occupancy (NSO) stipulation without waiver or modification, and with limited exception. In SFA, NSO without waiver, modification, or exception. • GHMA—Open to fluid mineral leasing, subject to existing planning decisions, which include closed to fluid minerals leasing, NSO, controlled surface use (CSU), and timing limitation (TL) stipulations and open to leasing, subject to standard stipulations. • Prioritize the leasing and development of fluid mineral resources outside of GRSG habitat.
Energy development—wind energy	<ul style="list-style-type: none"> • PHMA—Exclusion area (not available for wind energy development under any conditions)
Energy development—solar energy	<ul style="list-style-type: none"> • PHMA and GHMA—Exclusion area (not available for solar energy development under any conditions)
Infrastructure—major right-of-ways (ROW)	<ul style="list-style-type: none"> • PHMA—Avoidance area (may be available for major ROWs with special stipulations)
Infrastructure—minor ROWs	<ul style="list-style-type: none"> • PHMA—Avoidance area (may be available for minor ROWs with special stipulations)
Mining—locatable minerals	<ul style="list-style-type: none"> • SFA—Recommend withdrawal from the Mining Law of 1872
Mining—nonenergy leasable minerals	<ul style="list-style-type: none"> • PHMA—Closed area (not available for nonenergy leasable minerals)
Mining—mineral materials	<ul style="list-style-type: none"> • PHMA—Closed area (not available for salable minerals) with a limited exception (may remain open to free use permits and expansion of existing active pits if criteria are met)
Mining—coal	<ul style="list-style-type: none"> • PHMA is essential habitat for maintaining GRSG for the suitability criteria set forth at 43 Code of Federal Regulations (CFR), Part 3461.5(o)(1).
Improper livestock grazing	<ul style="list-style-type: none"> • Prioritize the review and processing of grazing permits and leases in SFA, followed by PHMA. • Include in the National Environmental Policy Act (NEPA) analysis for renewals and modifications of grazing permits and leases specific management thresholds, based on the GRSG habitat objectives table, land health standards, and ecological site potential, to allow adjustments to grazing that have already been subjected to NEPA analysis. • Prioritize field checks in SFA followed by PHMA to ensure compliance with the terms and conditions of grazing permits.

Table I-6
Key Components of the Utah Subregion ARMPA Addressing COT Report Threats

Threats to GRSG and Its Habitat (from COT Report)	Key Component of the Utah Subregion ARMPA
Free-roaming equid (wild horses and burros) management	<ul style="list-style-type: none"> • Manage herd management areas (HMAs) in GRSG habitat within established appropriate management level ranges to achieve and maintain GRSG habitat objectives. • Prioritize rangeland health assessment, gathers and population growth suppression techniques, monitoring, and review and adjustment of appropriate management levels and preparation of HMA plans in GRSG habitat.
Range management structures	<ul style="list-style-type: none"> • Allow range improvements that do not impact GRSG or that provide a conservation benefit to GRSG, such as fences for protecting important seasonal habitats.
Recreation	<ul style="list-style-type: none"> • PHMA—Do not construct new recreation facilities. • GHMA—Allow special recreation permits (SRPs) only if their effects on GRSG and its habitat are neutral or result in a net conservation gain.
Fire	<ul style="list-style-type: none"> • Identify and prioritize areas that are vulnerable to wildfires and prescribe actions important for GRSG protection. • Prioritize post-fire treatments in PHMA and GHMA.
Nonnative, invasive plant species	<ul style="list-style-type: none"> • Improve GRSG habitat by treating annual grasses. • Treat sites in GRSG habitat that contain invasive species infestations through an integrated pest management approach.
Sagebrush removal	<ul style="list-style-type: none"> • PHMA—Maintain all lands ecologically capable of producing sagebrush (but no less than 70 percent) with a minimum of 15 percent sagebrush cover, or as consistent with specific ecological site conditions. • Ensure that all BLM use authorizations contain terms and conditions regarding the actions needed to meet or progress toward meeting the habitat objectives for GRSG.
Pinyon and juniper expansion	<ul style="list-style-type: none"> • Remove conifers encroaching into sagebrush habitats, in a manner that considers tribal cultural values, prioritizing occupied GRSG habitat.
Agricultural conversion and exurban development	<ul style="list-style-type: none"> • Retain GRSG habitat in federal management.

The ARMPA also establishes screening criteria and conditions for new human activities in PHMA and GHMA to ensure a net conservation gain to GRSG. The ARMPA will reduce habitat disturbance and fragmentation by limiting surface-disturbing activities, while addressing changes in resource condition and use through monitoring and adaptive management.

The ARMPA adopts some key strategies of the State of Utah's Conservation Plan for Greater Sage-Grouse in Utah. It emphasizes GRSG habitat protections in the areas where GRSG populations are largest and have the greatest potential to maintain and increase populations. Similarly, the ARMPA provides additional flexibility for development in GHMA, while considering and applying conservation measures at the project-implementation stage. Within GHMA, the Utah ARMPA allows for wind energy and high voltage transmission ROW development, as well as oil and gas development. The Utah ARMPA

also integrates the state's strategy of improving GRSG habitat through vegetation treatments by setting treatment objectives established to increase areas available as GRSG habitat and reducing threats from wildfire.

For a full description of the BLM's ARMPA, see **Section 2**.

I.4 PLANNING CRITERIA

Planning criteria are based on appropriate laws, regulations, BLM manual and handbook sections, and policy directives. Criteria are also based on public participation and coordination with cooperating agencies, other federal agencies, state and local governments, and Native American tribes. Planning criteria are the standards, rules, and factors used as a framework to resolve issues and develop alternatives. Planning criteria are prepared to ensure decision-making is tailored to the issues and to ensure that the BLM avoid unnecessary data collection and analysis. Preliminary planning criteria were included in the Draft Resource Management Plan Amendment (RMPA)/Draft EIS and were further refined for the Proposed RMPA/Final EIS.

Planning criteria carried forward for this ARMPA are as follows:

- This ARMPA is consistent with the objectives and direction in BLM Manual 6840, which includes initiating proactive conservation measures that reduce or eliminate threats to BLM sensitive species and to minimize the likelihood of and need for listing species under the ESA. This includes providing sufficiently detailed land use plans (LUPs) to identify and resolve significant land use conflicts with BLM sensitive species without deferring conflict resolution to implementation-level planning (BLM Manual 6840.2B).
- The BLM used the Western Association of Fish and Wildlife Agencies (WAFWA) Conservation Assessment of Greater Sage-Grouse and Sagebrush Habitats (Connelly et al. 2004) and any other appropriate resources to identify GRSG habitat requirements and RDGs.
- This ARMPA is consistent with the BLM's 2004 National Sage-Grouse Habitat Conservation Strategy.
- This ARMPA complies with FLPMA, NEPA, Council on Environmental Quality regulations at 40 CFR, Parts 1500-1508, and Department of the Interior regulations at 43 CFR, Parts 46 and 1600; the BLM H-1601-1, Land Use Planning Handbook, "Appendix C: Program-Specific and Resource-Specific Decision Guidance Requirements" for affected resource programs; the 2008 BLM NEPA Handbook (H-1790-1), and all other applicable BLM policies and guidance.
- The implementation of the decisions in the alternatives will be contingent on the availability of needed budget and staffing resources.
- This ARMPA is limited to providing land use planning level direction specific to the conservation of GRSG habitats.
- The BLM considered standards to conserve GRSG habitat as well as objectives and management actions to restore, enhance, and improve GRSG habitat.
- This ARMPA recognizes valid existing rights.

- Lands addressed in this ARMPA are BLM-administered lands in GRSG habitats, including surface and split-estate lands with federal subsurface mineral rights. ARMPA decisions apply only to BLM-administered lands.
- The BLM used a collaborative and multi-jurisdictional approach, where appropriate, to determine the desired future condition of public lands for the conservation of GRSG and their habitats.
- As described by law and policy, the BLM ensured that conservation measures are as consistent as possible with other planning jurisdictions within the planning area boundaries.
- The BLM considered a range of reasonable alternatives, including appropriate management prescriptions that focus on the relative values of resources, while contributing to the conservation of GRSG and their habitat.
- The BLM considered a range of reasonable alternatives consistent with the conservation objectives and measures in the COT Report (USFWS 2013).
- The BLM addressed socioeconomic impacts of the alternatives. The socioeconomic analysis used IMPLAN, an accepted input-output quantitative model, for analysis.
- The BLM used the best available scientific information, research, technologies, and results of inventory, monitoring, and coordination to inform appropriate local and regional management strategies to enhance or restore GRSG habitats.
- Management of GRSG habitat in the Grand Staircase-Escalante National Monument will comply with Presidential Proclamation 6920 and other legislation applicable to Grand Staircase-Escalante National Monument.
- The ARMPA complies with the Trust Lands Management Act (Utah Code 53C) for lands administered by the State of Utah School and Institutional Trust Lands Administration (SITLA).
- The BLM does not have regulatory authority to directly affect activities conducted on state or private lands. However, when determining whether to permit or authorize an activity on federal lands, the BLM is required by NEPA to analyze the cumulative effects of activities on private and state lands, including activities that would disturb GRSG habitat.
- Management of GRSG habitat that intersects with wilderness study areas (WSAs) on public lands administered by the BLM will be guided by the Manual 6330, Management of Wilderness Study Areas. Land use allocations made for WSAs must be consistent with the Manual 6330 and with other laws, regulations, and policies related to WSA management.
- All activities and uses within GRSG habitats follow existing land health standards. Standards and guidelines for livestock grazing and other programs that have developed standards and guidelines are applicable to this ARMPA.
- The BLM consulted with American Indian tribes to identify sites, areas, and objects important to their cultural and religious heritage within GRSG habitats.
- The BLM coordinated and communicated with state, local, and tribal governments to ensure that it considered provisions of pertinent plans, that it seek to resolve inconsistencies

between state, local, and tribal plans, and that it provide ample opportunities for state, local, and tribal governments to comment on the development of this ARMPA.

- This ARMPA is based on the principles of adaptive management.
- Reasonably foreseeable development scenarios and planning for fluid minerals follows the BLM Handbook H-1624-1, Planning for Fluid Mineral Resources, and current fluid minerals manual guidance for fluid mineral (oil and gas, coal bed methane, and oil shale) and geothermal resources.
- This ARMPA was developed using an interdisciplinary approach to prepare reasonably foreseeable development scenarios, to identify alternatives, and to analyze resource impacts, including cumulative impacts on natural and cultural resources and the socioeconomic environment.
- The most currently approved BLM corporate spatial data was supported by current metadata and will be used to ascertain GRSG habitat extent and quality. Data was consistent with the principles of the Information Quality Act of 2000.
- The BLM used state game and fish agencies' GRSG data and expertise to the fullest extent practicable in making management determinations on federal lands.
- Where more restrictive land use allocations or decisions are in effect for other resources (e.g., WSAs, areas of critical environmental concern, cultural resources, and riparian areas) under existing LUPs, those more restrictive land use allocations or decisions are not amended by this ARMPA.

This page intentionally left blank.

CHAPTER 2

APPROVED RESOURCE MANAGEMENT PLAN

AMENDMENT

2.1 APPROVED RESOURCE MANAGEMENT PLAN AMENDMENT INSTRUCTIONS

This ARMPA is now the baseline plan for GRSG management in Utah in the Cedar City, Fillmore, Kanab, Moab, Price, Richfield, Salt Lake, and Vernal Field Offices and the Grand Staircase-Escalante National Monument. The ARMPA adopts the management described in the Utah Greater Sage-Grouse Proposed Land Use Plan Amendment and Final Environmental Impact Statement (2015), with modifications and clarifications as described in the *Modifications and Clarifications* section of the record of decision (ROD).

In the event there are inconsistencies or discrepancies with previously approved RMPs, the decisions contained in this ARMPA will be followed, unless there are more restrictive decisions in the existing plans. The more restrictive decisions in the existing plans will be implemented. As appropriate, the BLM will continue to tier to statewide, national, and programmatic EISs and other NEPA and planning documents. It will continue to consider and apply RDFs or other management protocols contained in other planning documents after appropriate site-specific analysis.

All future resource authorizations and actions in GRSG habitat will conform to or be consistent with the decisions contained in this ARMPA. All existing operations and activities authorized under permits, contracts, cooperative agreements, or other authorizations will be modified, as necessary, to conform to this ARMPA within a reasonable time frame. However, this ARMPA does not repeal valid existing rights on public lands. A valid existing right is a claim or authorization that takes precedence over the decisions developed in this ARMPA. If such authorizations come up for review and can be modified, they will also be brought into conformance with this ARMPA.

While the Final EIS for the Utah Greater Sage-Grouse Proposed Land Use Plan Amendment constitutes compliance with NEPA for the broad-scale decisions made in this ARMPA, the BLM will continue to prepare environmental assessments and EISs where appropriate as part of implementation level planning and decision-making.

2.2 GOALS, OBJECTIVES, AND MANAGEMENT ACTIONS

This section of the ARMPA presents the goals, objectives, land use allocations, and management actions established for protecting and preserving GRSG and its habitat on public lands managed by the BLM in Utah. The BLM will apply these actions where the BLM has discretion to implement them; the actions do not apply in areas where the BLM does not administer the surface or mineral estate. These management decisions are presented by program area. Not all types of decisions were identified for each program. A *Monitoring Framework* is also included (in **Appendix D**, Greater Sage-Grouse Monitoring Framework) to describe how the implemented program decisions will be monitored.

This section is organized by program area beginning with the Special Status Species (SSS) program, which identifies specific goals, objectives, and management actions for GRSG and its habitat. For ease of identification into the future, each program area has identified abbreviations (see below) for these program areas and each decision in that program is numbered in coordination with the abbreviation:

- Special Status Species (**SSS**)
- Vegetation (**VEG**)
- Fire and Fuels Management (**FIRE**)
- Livestock Grazing (**LG**)
- Wild Horses and Burros (**WHB**)
- Minerals Resources (**MR**)
 - Fluid Minerals
 - Locatable Minerals
 - Saleable Minerals
 - Non-Energy Leasable Minerals
 - Coal
 - Mineral Split Estate
- Renewable Energy (Wind and Solar) (**RE**)
- Lands and Realty (**LR**)
- Recreation (**REC**)
- Travel and Transportation (**TTM**)

Table 2-1, Summary of Allocation Decisions by GRSG Habitat Management Areas, is a summary of the allocation decisions presented for each GRSG habitat management area.

Table 2-1
Summary of Allocation Decisions by GRSG Habitat Management Areas

Resource	PHMA	GHMA
Land Tenure	Retain	Retain
Solar	Exclusion*	Exclusion*
Wind	Exclusion	Open**
Major ROWs	Avoidance	Open**
Minor ROWs	Avoidance	Open**
Oil and Gas	Open with Major Stipulations	Open with Standard Stipulations**
Geothermal	Open with Major Stipulations	Open with Standard Stipulations**
Non-energy Leasables	Closed	Open**
Salable Minerals	Closed	Open**
Locatable Minerals	SFA = Recommend Withdrawal Other PHMA = Open**	Open**
Travel Management	Limited	Limited
Livestock Grazing	Open	Open

Notes:

*The BLM's Approved Resource Management Plan Amendments/ROD for Solar Energy Development in Six Southwestern States (October 2012) excluded all GRSG occupied habitat to new utility-scale solar development. Those allocations have not been changed in this land use plan amendment.

**No additional allocations will be added for GRSG as a result of this amendment process. However, allocations present in the existing land use plans will continue (e.g., existing GRSG allocations, fluid mineral closure for WSAs, and allocations to protect a wild and scenic rivers).

2.2.1 Special Status Species (SSS)

Goal SSS-1: *Maintain and/or increase GRSG abundance and distribution by conserving, enhancing or restoring the sagebrush ecosystem upon which populations depend in collaboration with other conservation partners.*

Objective SSS-1: Designate PHMA that are large enough to stabilize populations in the short-term and enhance populations over the long-term.

Protect PHMA from anthropogenic disturbances that will reduce distribution or abundance of GRSG. Enhance or improve GRSG habitat (e.g., through restoration or rehabilitation activities) within PHMA that has been impaired or altered.

Objective SSS-2: In all GRSG habitat, manage activities that result in habitat loss and degradation to provide a net conservation gain of GRSG habitat. Exceptions to net conservation gain for GRSG shall be made for vegetation treatments to benefit Utah prairie dog.

Objective SSS-3: In all GRSG habitat, where sagebrush is the current or potential dominant vegetation type or is a primary species within the various states of the ecological site description, maintain or restore vegetation to provide habitat for lekking, nesting, brood rearing, and winter habitats.

The Habitat Objectives for Greater Sage-Grouse (see **Table 2-2**, Habitat Objectives for Greater Sage-Grouse) summarize the characteristics that research has found represent the seasonal habitat needs for GRSG. The specific seasonal components identified in **Table 2-2** were adjusted based on local science

Table 2-2
Habitat Objectives for Greater Sage-Grouse

ATTRIBUTE	INDICATORS	DESIRED CONDITION
Breeding and Nesting (February 15-June 15)^{1, 2, 3, 4, 5, 6}		
Lek Security	Proximity of trees	Trees absent or uncommon on shrub/grassland ecological sites within 1.8 miles (approx. 3 kilometers) of occupied leks. ^{6, 7, 8}
	Proximity of sagebrush to leks	Has adjacent sagebrush cover. ⁶
Cover	% of seasonal habitat meeting desired conditions	>80% of the mapped nesting habitat meets the recommended vegetation characteristics, where appropriate (relative to ecological site potential, etc.). ⁸
	Sagebrush cover	<u>>15%</u> ^{6, 8, 9}
	Total shrub cover ^{6, 8, 9}	15-30%: Box Elder, Parker Mountain, Bald Hills, Hamlin Valley, Panguitch, Uintah south of Hwy 40 15-35%: Rich, Carbon, Emery, Sheeprock, Ibapah, Uintah north of Highway 40
	Sagebrush height ^{6, 8, 9}	>12 inches (30 cm): Box Elder, Bald Hills, Hamlin Valley, Sheeprock, Ibapah >10 inches (25 cm): Rich, Carbon, Emery, Uintah north of Highway 40 >8 inches (20 cm): Parker Mountain, Panguitch, Uintah south of Highway 40
	Predominant sagebrush shape ¹⁰	>50% in spreading (applicable to the specific sagebrush types prone to columnar vs. spreading shape e.g., Wyoming, not black sage) ⁶
	Perennial grass cover (such as native bunchgrasses, rhizomatous grasses called for on applicable ecological site descriptions, or other perennial grasses that provide similar functionality) ^{6, 8, 9}	>10%: Box Elder, Bald Hills, Hamlin Valley, Rich, Carbon, Emery, Sheeprock, Ibapah, Uintah north of Highway 40 >5%: Parker Mountain, Panguitch, Uintah south of Highway 40
	Perennial grass and forb height (includes residual grasses) ^{6, 8, 9}	Provide overhead and lateral concealment from predators. ¹¹
	Perennial forb canopy cover ^{6, 8, 9}	>5%: Box Elder, Bald Hills, Hamlin Valley, Rich, Carbon, Emery, Sheeprock, Ibapah, Uintah north of Highway 40 >3%: Parker Mountain, Panguitch, Uintah south of Highway 40
Brood-Rearing/Summer (April 15-August 15)¹		
Cover	% of Seasonal habitat meeting desired condition	>40% of the mapped brood-rearing/summer habitat meets recommended habitat characteristics where appropriate (relative to ecological site potential, etc.) ⁸
	Sagebrush cover ^{6, 8, 9}	>10%
	Total shrub cover ^{6, 8, 9}	10-25%: Box Elder, Bald Hills, Hamlin Valley, Panguitch, Rich, Parker Mountain, Uintah 10-30%: Carbon, Emery, Sheeprock, Ibapah,
	Sagebrush height ^{6, 8, 9}	>12 inches (30 cm): Box Elder, Bald Hills, Hamlin Valley, Sheeprock, Ibapah >10 inches (25 cm): Rich, Carbon, Emery, Uintah north of Highway 40 >8 inches (20 cm): Parker Mountain, Panguitch, Uintah south of Highway 40
	Perennial grass cover and forbs ^{6, 8, 9}	>15% (Grass: >10%; Forb: >5%): Box Elder, Rich, Sheeprock, Ibapah, Parker Mountain, Panguitch, Uintah, Carbon, Emery >15% (Grass: >8%; Forb: >7%): Bald Hills, Hamlin Valley,

Table 2-2
Habitat Objectives for Greater Sage-Grouse

ATTRIBUTE	INDICATORS	DESIRED CONDITION
	Riparian areas/mesic meadows	Proper Functioning Condition
	Upland and riparian perennial forb availability	Preferred forbs are common with several preferred species present ^{6, 12}
Winter (November 15-March 15)¹		
Cover and Food	% of seasonal habitat meeting desired conditions	>80% of the mapped wintering habitat meets winter habitat characteristics where appropriate (relative to ecological site, etc.). ⁸
	Sagebrush cover above snow ^{6, 8,}	>10%
	Sagebrush height above snow ^{6, 8, 9, 13}	>10 inches (25 cm): Box Elder, Bald Hills, Hamlin Valley, Rich, Carbon, Emery, Sheeprock, Ibapah, Uintah north of Highway 40 >8 inches (20 cm): Parker Mountain, Panguitch, Uintah south of Highway 40

¹ Specific dates will be based on site-specific conditions and may be modified due to documented local variations (e.g., higher/lower elevations) or annual climactic fluctuations (e.g., early/late spring, and long and/or heavy winter), in coordination with the appropriate State of Utah agency.

² Utah Greater Sage-Grouse Working Group 2013

³ Doherty 2008

⁴ Doherty et al. 2010

⁵ Holloran and Anderson 2005

⁶ Stiver et al. 2015 *In Press*

⁷ Baruch-Mordo et al. 2013

⁸ Connelly et al. 2000

⁹ Unpublished data, Utah Community-Based Conservation Program Greater Sage-grouse Statewide Database, Utah State University, Logan, Utah and Brigham Young University, Provo, Utah. Summarization and analysis of nesting and brood-rearing habitat characteristics from data collected through Utah State University and Brigham Young University research efforts. Researchers located the nest and brood sites using radio-marked telemetry methods. Shortly after the site was used by the marked bird (after hatch or use by a brood), vegetation characteristics on the site were measured using the line intercept method for shrub canopy cover and Daubenmire frames for herbaceous cover. Researchers across the various study areas used methods that followed the guidelines identified in Connelly et al. (2003).

¹⁰ Sagebrush plants that are more tree or columnar-shaped provide less protective cover near the ground than sagebrush plants with a spreading shape (Stiver et al. 2015 *In Press*). Some sagebrush plants are naturally columnar (e.g., Great Basin big sagebrush), and a natural part of the plant community. However, a predominance of columnar shape arising from animal impacts may warrant management investigation or adjustments at site specific scales.

¹¹ Specific height requirements needed to meet the objective will be set at the time of watershed assessments.

¹² Preferred forbs are listed in Stiver et al. 2015 *In Press*. Overall total forb cover may be greater than that of preferred forb cover since not all forb species are listed as preferred.

¹³ The height of sagebrush remaining above the snow depends upon snow depth in a particular year. Intent is to manage for tall, healthy, sagebrush stands.

and monitoring data to define the range of characteristics used in the Utah Sub-region. Thus, the habitat objectives provide the broad vegetative conditions we strive to obtain across the landscape that indicate the seasonal habitats used by GRSG. These habitat indicators are consistent with the rangeland health indicators used by the BLM.

The habitat objectives will be part of the GRSG habitat assessment to be used during land health evaluations (see **Appendix D**). These habitat objectives are not obtainable on every acre within the designated GRSG habitat management areas. Therefore, the determination on whether the objectives have been met will be based on the specific site's ecological ability to meet the desired condition identified in the table. In addition, areas where PHMA and GHMA overlap mapped Utah prairie dog

habitat will be managed for both species; accomplishing this shall include coordination with species-specific experts to develop conservation and recovery objectives that will benefit both species.

All BLM use authorizations will contain terms and conditions regarding the actions needed to meet or progress toward meeting the habitat objectives. If monitoring data show the habitat objectives have not been met nor progress being made towards meeting them, there will be an evaluation and a determination made as to the cause. If it is determined that the authorized use is a cause, the use will be adjusted by the response specified in the instrument that authorized the use.

When using the above indicators and desired conditions to guide management actions or during land health assessments, consider that they are sensitive to the ecological processes operating at the scale of interest and that a single habitat indicator does not necessarily define habitat suitability for an area or particular scale. Indicators must be collectively reviewed, assessed based on the site potential, and put into spatial and temporal context to correctly determine habitat suitability, which will include more than one scale and multiple indicators.

Objective SSS-4: Within PHMA, increase the amount and functionality of seasonal habitats by:

- Maintaining or increasing sagebrush in perennial grasslands, where needed to meet the Habitat Objectives for Greater Sage-Grouse (**Table 2-2**), unless there is a conflict with Utah prairie dog.
- Reducing conifer (e.g., pinyon/juniper) from areas that are most likely to support GRSG at a rate that is at least equal to the rate of encroachment.
- Reducing the extent of annual grasslands.
- Maintaining or improving corridors for migration or movement between seasonal habitats, as well as for long-term genetic connections between populations.
- Maintaining or improving understory (grass, forb) and/or riparian condition within breeding and late brood-rearing habitats.
- Conducting vegetation treatments based on the following 10-year (decadal) acreage objectives:

Population Areas	Mechanical Treatment ¹	Annual Grass Treatment ¹
Box Elder	9,300	17,800
Ibapah; Hamlin Valley	17,900	2,100
Rich; Uintah	40,700	6,800
Carbon	2,600	200
Bald Hills; Panguitch	43,900	8,900
Parker Mountain	32,800	2,200
Sheeprocks	33,700	10,000
Statewide	180,900	48,000

¹ These acreage figures, based on Vegetation Dynamics Development Tool modeling, represent an objective for treatment on BLM-administered lands over a 10-year (decadal) time frame to support achievement or progress toward GRSG habitat objectives (see Final EIS Appendix V, Great Basin Vegetation Modeling using Vegetation Dynamics Development Tool). This accounts for variations in yearly funding availability and does not reflect a maximum or minimum acreage for any one treatment type or total treatment acreage, should funding and site specific conditions allow for more or less treatment acreage than described in order to meet habitat objectives.

Outside PHMA (in adjacent opportunity areas) improve and restore historical GRSG habitat to support GRSG populations and to maintain or enhance connectivity. Statewide, complete a decadal average of 170,200 acres of mechanical treatments and 33,000 acres of annual grass treatments. Prioritization is for completion of treatments within PHMA before treating areas outside.

Objective SSS-5: Participate in local GRSG conservation efforts (e.g., the appropriate State of Utah agency, Natural Resources Conservation Service (NRCS), and local working groups) to implement landscape-scale habitat conservation, to implement consistent management to benefit GRSG, and to gather and use local research and monitoring to promote the conservation of GRSG.

Management Actions (MA)

MA-SSS-1: Identify PHMA and GHMA as follows (Figure 2-1, Habitat Management Areas [Appendix A, Approved RMP Amendment Maps]):

Population Area	Acres					
	PHMA			GHMA		
	Total Surface ¹	BLM Surface ²	Split Estate Minerals ³	Total Surface ¹	BLM Surface ²	Split Estate Minerals ³
Uintah	566,800	263,200	140,800	991,500	294,200	81,700
Carbon ⁴	260,100	43,500	124,200	198,700	82,800	19,200
Emery	85,500	100	84,000	11,400	0	9,700
Parker Mtn.	741,300	214,200	378,300	12,900	0	7,400
Panguitch	343,900	163,200	91,000	0	0	0
Bald Hills	326,400	259,400	5,200	21,200	8,300	1,200
Hamlin Valley	143,700	101,500	6,600	0	0	0
Sheeprocks	534,600	327,100	110,500	296,500	106,800	21,200
Ibapah	88,800	48,000	700	10,800	10,100	0
Box Elder	1,135,700	439,200	112,000	0	0	0
Rich	1,051,000	167,000	178,400	197,900	300	20,600
Lucerne	0	0	0	37,500	0	11,500
Strawberry	161,500	0	40,900	20,600	0	500
WY-Uinta	1,100	0	1,100	20,900	0	20,900
WY-Blacks Fork	23,700	0	23,700	31,100	0	31,100
Statewide	5,464,100	2,026,400	1,297,400	1,851,000	502,500	225,000
% PHMA/GHMA	75%	80%	85%	25%	20%	15%

¹ Acreage associated with total PHMA/GHMA polygon, regardless of land ownership.

² Acreage within PHMA/GHMA where the BLM has managerial authority on the surface estate.

³ Acreage where the surface and mineral estates are owned or administered by separate entities. These acres show where the surface estate is not BLM (e.g., private, state, tribal, and Forest Service), but that have a federal mineral estate administered by the BLM. Most minerals decisions apply to the combination of the BLM surface and mineral estates.

⁴ The 41,200 acres of National Forest System lands in the Anthro Mountain area would be managed as neither PHMA nor GHMA. These areas would be identified as "Anthro Mountain." In the BLM's RMPPA, these areas are considered split-estate, where the BLM administers the mineral estate.

The BLM will apply these the goals, objectives, and management actions where the agency has discretion to implement them; the actions do not apply in areas where the BLM does not administer the surface or mineral estate.

Minor adjustments to PHMA/GHMA external boundaries can be made if BLM biologists, in coordination with the appropriate State of Utah agency, determine site-specific conditions warrant such changes to more accurately depict existing or potential GRSG habitat. The appropriate planning process (i.e., plan maintenance or plan amendment) will be used, as determined on a case-by-case basis considering site-specific issues. See additional information and protocol on adjusting occupied habitat and PHMA/GHMA boundaries in **Appendix K**, Greater Sage-Grouse Baseline and Habitat Update Protocol.

The PHMA and GHMA objectives and management actions would apply to existing sagebrush areas and areas with ecological sagebrush potential within the respective PHMA and GHMA polygons. In the mapped PHMA and GHMA there may be areas that lack the principle habitat components necessary for GRSG, including but not limited to rock outcrops, alkaline flats, and pinyon-juniper ecological sites. These are areas that do not have existing sagebrush or ecological potential to contain sagebrush. These areas of non-habitat may be identified during site-specific project review by agency biologists, in discussion with the appropriate State of Utah agency.

Because of the importance of PHMA to conserve, enhance and restore GRSG and its habitat, objectives and management actions will apply to all the areas within the respective PHMA polygons. The GHMA objectives and management actions will apply to the areas of identified non-habitat within the GHMA polygons unless all the following conditions are met:

- the non-habitat does not provide important connectivity between areas with existing or potential habitat;
- all direct and indirect impacts that impair the function of adjacent seasonal habitats or the life-history or behavioral needs of the GRSG population are eliminated through project design (e.g., minimize sound, preclude tall structures, require perch deterrents), as demonstrated in the project's NEPA document.

Exceptions in non-habitat may be approved by the Authorized Officer, but only with the concurrence of one level of delegated authority above the Authorized Officer.

Any exception granted based on the above criteria would only apply to the specific project-level authorization. Proposed projects in the same area would need to undergo individual analysis to confirm the criteria are met prior to subsequent authorizations. Excepting a site-specific project from compliance with GRSG management in an area of non-habitat would not change the boundaries of PHMA or GHMA.

MA-SSS-2: Designate SFA as shown on **Figure 2-1** (181,100 acres of BLM surface estate; 52,200 acres split-estate federal minerals). SFA will be managed as PHMA, with the following additional management:

- Recommended for withdrawal from the Mining Law of 1872 (as amended), subject to valid existing rights.
- Managed as NSO, without waiver, exception, or modification, for fluid mineral leasing.
- Prioritized for vegetation management and conservation actions in these areas, including, but not limited to land health assessments, wild horse and burro management actions, review of livestock grazing permits/leases, and habitat restoration (see specific management sections).

MA-SSS-3: In PHMA, apply the following management to discretionary disturbances or activities that are not otherwise excluded or closed to minimize and mitigate effects on GRSG and its habitat from the project/activity:

A- Net Conservation Gain

In all GRSG habitat, in undertaking BLM management actions, and, consistent with valid existing rights and applicable law, in authorizing third-party actions that result in habitat loss and degradation, the BLM will require and ensure mitigation that provides a net conservation gain to the species, including accounting for any uncertainty associated with the effectiveness of such mitigation. This will be achieved by avoiding, minimizing, and compensating for impacts by applying beneficial mitigation actions. Exceptions to net conservation gain for GRSG shall be made for vegetation treatments to benefit Utah prairie dog.

Mitigation will be conducted according to the mitigation framework contained in **Appendix F**, Mitigation Strategy: Utah Greater Sage-Grouse RMPA.

Consider the likelihood of development of not-yet-constructed surface-disturbing activities – as defined in Table D.2 of the Monitoring Framework (**Appendix D**)—under valid existing rights prior to authorizing new projects in PHMA.

B- Disturbance Cap

In PHMA, manage discrete anthropogenic disturbances, whether temporary or permanent, so they cover less than 3 percent of 1) PHMA associated with a GRSG population area (**Figure 2-2**, GRSG Biologically Significant Units and Priority Habitat Management Areas [**Appendix A**] – referred to as BSU when coordinating across state lines) and 2) within a proposed project analysis area. See **Appendix E**, Greater Sage-Grouse Disturbance Cap Guidance, for additional information on implementing the disturbance cap, including what is and is not considered disturbance and how to calculate the proposed project analysis area.

If the 3 percent anthropogenic disturbance cap is exceeded on all lands (regardless of land ownership) within GRSG PHMA in any given population area (BSU), then no further discrete anthropogenic disturbances (subject to applicable laws and regulations, such as the Mining Law of 1872 [as amended], valid existing rights, etc.) will be permitted by the BLM within GRSG PHMA in any given population area (BSU) until the disturbance has been reduced to less than the cap.

If the 3 percent disturbance cap is exceeded on all lands (regardless of land ownership) within a proposed project analysis area in PHMA, then no further anthropogenic disturbance will be permitted by the BLM until disturbance in the proposed project analysis area has been reduced to maintain the area under the cap (subject to applicable laws and regulations, such as the Mining Law of 1872 [as amended], valid existing rights, etc.). Within designated utility corridors, the 3 percent disturbance cap may be exceeded at the project scale if the site specific NEPA analysis indicates that a net conservation gain to the species will be achieved. This exception is limited to projects which fulfill the use for which the corridors were designated (ex., transmission lines, pipelines) and the designated width of a corridor will not be exceeded as a result of any project co-location.

An area with disturbance is not excluded from the 3 percent until it has been restored to provide GRSG habitat. The objective of successful restoration is to provide for the needs of GRSG, as evidenced by one of the following:

- Vegetative cover is consistent with the GRSG habitat objectives and the ecological site description (Objective SSS-3), or
- Monitoring indicates the area is regularly used by GRSG to sustain one or more seasonal habitat requirements (nesting, brood-rearing, winter).

Final restoration success and approval for abandonment for disturbances will be subject to an interdisciplinary review of available monitoring data and final monitoring reports.

C- Density of Energy/Mining Facilities

Subject to applicable laws and regulations and valid existing rights, if the average density of one energy and mining facility per 640 acres (the density cap) is exceeded on all lands (regardless of land ownership) in PHMA within a proposed project analysis area, then no further disturbance from energy or mining facilities will be permitted by BLM: (1) until disturbance in the proposed project analysis area has been reduced to maintain the limit under the cap; or (2) unless the energy or mining facility is collocated into an existing disturbed area (subject to applicable laws and regulations, such as the Mining Law of 1872 [as amended], valid existing rights, etc.). Energy and mining facilities to which this action applies are:

- Oil and gas wells and development facilities,
- Coal mines,
- Wind towers,
- Solar fields,
- Geothermal wells/developments, and
- Active locatable, leasable, and saleable developments.

D- Predation

In PHMA, eliminate or minimize external food sources for corvids, particularly dumps, or waste transfer facilities. Apply best management practices (BMP) to development activities to reduce opportunities for GRSG predators (e.g., limiting food sources, nest/perches deterrents, and road kill).

Apply habitat management practices (e.g. grazing management and vegetation treatments) that decrease the effectiveness of predators.

Collaborate with applicable government entities to implement programs to control predator populations of GRSG (e.g., ravens, red fox, badgers, and raccoons).

E- Noise Restrictions

In PHMA, limit noise from discrete anthropogenic disturbances, whether during construction, operation, or maintenance, to not exceed 10 decibels above ambient sound levels (as available at the signing of the GRSG RMPA ROD or as first measured thereafter) at occupied leks from 2 hours before to 2 hours

after official sunrise and sunset during breeding season (e.g., while males are strutting). Support the establishment of ambient baseline noise levels for PHMA habitat area leks.

Limit project related noise in other PHMA habitats and seasons where it will be expected to reduce functionality of habitats that support associated GRSG populations.

As additional research and information emerges, specific new limitations appropriate to the type of projects being considered will be evaluated and appropriate measures will be implemented where necessary to minimize potential for noise impacts on PHMA GRSG population behavioral cycles.

F- Tall Structure Restrictions

In PHMA, limit the placement of permanent tall structures within GRSG breeding and nesting habitats.

For the purposes of this restriction, a tall structure is any man-made structure that provides for perching/nesting opportunities for predators (e.g., raptors and ravens) that are naturally absent, or that decreases the use of an area by GRSG. A determination as to whether something is considered a tall structure will be made based on local conditions such as existing vegetation or topography.

G- Seasonal Restrictions

In PHMA, in coordination with the appropriate State of Utah agency, apply seasonal restrictions during the period specified below to manage discretionary discrete anthropogenic disturbances and uses on public lands to prevent disturbance to GRSG populations and habitat during seasonal life cycle periods as follows:

- In breeding (leks), nesting and early brood-rearing habitat from Feb 15 – Jun 15
- In brood rearing habitat from Apr 15 – Aug 15
- In winter habitat from Nov 15 – Mar 15

Specific time and distance determinations will be based on site-specific conditions and may be modified due to documented local variations (e.g., higher/lower elevations) or annual climactic fluctuations (e.g., early/late spring and long and/or heavy winter) in order to better protect GRSG, in coordination with the appropriate State of Utah agency.

H- Buffers

In undertaking BLM management actions, and consistent with valid and existing rights and applicable law in authorizing third-party actions, the BLM will apply the lek buffer-distances identified in the US Geological Survey Report *Conservation Buffer Distance Estimates for Greater Sage-Grouse – A Review* (Open File Report 2014-1239; Manier et al. 2014) in accordance with **Appendix B, Applying Lek-Buffer Distances**.

I- Required Design Features

In PHMA, apply the RDFs from the applicable sections identified in **Appendix C, Required Design Features**, when authorizing/permitting site-specific activities/projects for wildland fire management actions, travel and transportation, lands and realty, fluid minerals, nonenergy leasable minerals, coal, mineral materials, and locatable minerals (consistent with applicable law).

The applicability and overall effectiveness of each RDF cannot be fully assessed until the project level when the project location and design are known. Because of site-specific circumstances, some RDFs may not apply to some projects and/or may require slight variations. All variations in RDFs will require that at least one of the following be demonstrated in the NEPA analysis associated with the project/activity:

- A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable;
- An alternative RDF, state-implemented conservation measure, or plan-level protection is determined to provide equal or better protection for GRSG or its habitat;
- A specific RDF will provide no additional protection to GRSG or its habitat.

MA-SSS-4: In PHMA and in adjacent opportunity areas, maintain, improve and restore GRSG habitat to support GRSG populations and to maintain or enhance connectivity. Vegetation treatments will be applied to meet GRSG habitat objectives and provide additional GRSG habitat, unless there is a conflict with Utah prairie dog, where the landscape will be managed for both species.

PHMA boundaries may be adjusted to include additional restored GRSG habitat and habitat identified during survey or inventory work. Changes to maps and associated management will occur through the appropriate BLM planning processes (e.g., plan maintenance or plan amendment), as described in **Appendix K**.

MA-SSS-5: In GHMA, apply the following management to meet the objective of a net conservation gain for discretionary actions that can result in habitat loss and degradation:

A- Existing Management

Implement GRSG management actions included in the existing RMPs and project-specific mitigation measures associated with existing decisions.

B- Net Conservation Gain

In all GRSG habitat, in undertaking BLM management actions, and, consistent with valid existing rights and applicable law, in authorizing third-party actions that result in habitat loss and degradation, the BLM will require and ensure mitigation that provides a net conservation gain to the species, including accounting for any uncertainty associated with the effectiveness of such mitigation. This will be achieved by avoiding, minimizing, and compensating for impacts by applying beneficial mitigation actions. Exceptions to net conservation gain for GRSG may be made for vegetation treatments to benefit Utah prairie dog.

Mitigation will be conducted according to the mitigation framework contained in **Appendix F**.

C- Buffers

In undertaking BLM management actions, and consistent with valid and existing rights and applicable law in authorizing third-party actions, the BLM will apply the lek buffer-distances identified in the US

Geological Survey Report *Conservation Buffer Distance Estimates for Greater Sage-Grouse – A Review* (Open File Report 2014-1239; Manier et al. 2014) in accordance with **Appendix B**.

D- Required Design Features

In GHMA, apply the fluid mineral RDFs that are associated with GHMA identified in **Appendix C** when authorizing/permitting site-specific fluid mineral development activities/projects.

The applicability and overall effectiveness of each RDF cannot be fully assessed until the project level when the project location and design are known. Because of site-specific circumstances, some RDFs may not apply to some projects and/or may require slight variations. All variations in RDFs will require that at least one of the following be demonstrated in the NEPA analysis associated with the project/activity:

- A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable;
- An alternative RDF, state-implemented conservation measure, or plan-level protection is determined to provide equal or better protection for GRSG or its habitat;
- A specific RDF will provide no additional protection to GRSG or its habitat.

MA-SSS-6:

Sage-Grouse Management outside PHMA/GHMA

Proposed projects within State of Utah Sage-Grouse Management Areas (SGMA) and USFWS priority areas for conservation (PAC), as well as adjacent to PHMA outside these areas, will consider impacts on GRSG and implement measures to mitigate impacts when preparing site-specific planning and environmental compliance documents.

Outside of PHMA, prior to site-specific authorizations, the BLM will evaluate habitat conditions and may require surveys to determine if the project area contains GRSG habitat (FLPMA, 43 United States Code (USC) 1701 Sec. 201 (a); BLM Manual 6840.04 D3; BLM-M-6840.04 E2). Surveys will be required prior to authorizing discrete anthropogenic disturbances within 4 miles of an occupied lek that is located in PHMA, but only in existing sagebrush.

If an area is determined to be GRSG habitat (e.g., nesting, brood-rearing, winter, transition), mitigation will be considered as part of the project level NEPA analysis and will be attached as conditions of approval to new discretionary actions, if deemed necessary to protect the habitat (BLM Manual 6840.04 D 5). Measures that may be considered include those identified in **Appendix C**.

Outside of PHMA, but within SGMA and PACs, avoid removal of sagebrush and minimize development that creates a physical barrier to GRSG movement; these areas may be used by GRSG to connect to other populations or seasonal habitat areas. Exceptions shall be made for vegetation treatments to benefit Utah prairie dog, where the landscape will be managed for both species.

Outside of PHMA, but within SGMA and PACs, consider noise and permanent structure stipulations around leks.

Outside PHMA, portions of State of Utah opportunity areas (see Final EIS **Map 2.4**) within 4 miles of a lek that is located in PHMA will be managed with the following allocations:

- Fluid minerals will be open for leasing with CSU stipulations (noise and tall structures).
- Lands ROWs, permits, and leases will be avoided, applying avoidance criteria for noise and tall structures.

Do not site wind energy development in opportunity areas within 5 miles from occupied GRSG leks that are in PHMA.

Outside of PHMA, avoid and minimize effects from discrete anthropogenic disturbances in areas that have been treated with the intent of improving or creating new GRSG habitat. Evaluate conditions in the treated area to determine if it is providing habitat for GRSG and if additional measures are necessary to protect the habitat.

MA-SSS-7:

Adaptive Management

This plan establishes soft and hard triggers for both GRSG populations and habitat. The specific triggers and additional detail on the management responses are identified in **Appendix I**, Adaptive Management. The hard and soft trigger data will be analyzed as soon as it becomes available after the signing of the ROD and then at a minimum, analyzed annually thereafter.

If monitoring indicates the soft-trigger is met, the BLM will determine if there is a specific cause or causes that are contributing to the decline. If it is determined that the decline is related to a natural population variation, no specific management actions will be required. However, if BLM management actions are determined to cause or contribute to the decline, the BLM manager will apply measures within their implementation-level discretion to mitigate the decline of populations and/or habitats to the area where the trigger has been met. These measures will apply more conservative or restrictive implementation conservation conditions, terms, or decisions within the agencies' discretion to mitigate the decline of populations and/or habitats.

If monitoring indicates the hard trigger is met, a set of specific management actions from the BLM Proposed Plan will immediately be replaced with or adjusted by different management actions in the area where the trigger has been met. Table I.1 of **Appendix I** identifies the management actions from the BLM Proposed Plan, and the corresponding new management actions that will be immediately implemented to the specific area in the event a hard trigger is met. In addition to these specific changes, the BLM will review available and pertinent data for the area, in coordination GRSG biologists from multiple agencies including the appropriate State of Utah agency, USFWS, and NRCS, to determine the causal factor(s) and implement a corrective strategy. The final strategy associated with a hard trigger being met will be the changes identified in Table I.1 of **Appendix I**, and may also include the need to further amend or revise the RMP to address the situation and modify management accordingly, for the area where the trigger was met.

2.2.2 Vegetation (VEG)

Objective VEG-I: In SFA and PHMA, the desired condition is to maintain all lands ecologically capable of producing sagebrush (but no less than 70 percent) with a minimum of 15 percent sagebrush cover or as consistent with specific ecological site conditions; exceptions to this objective shall be made where GRSG habitat and Utah prairie dog occur on the same landscape, which will be managed for both species. The attributes necessary to sustain these habitats are described in Interpreting Indicators of Rangeland Health (BLM Tech Ref 1734-6).

Management Actions (MA)

MA-VEG-I: In PHMA, where necessary to meet GRSG habitat objectives, treat areas to maintain and expand healthy GRSG habitat (e.g., conifer encroachment areas and annual grasslands).

In PHMA, prioritize implementation of restoration/treatment projects based on environmental variables that improve chances for project success in areas most likely to benefit GRSG (e.g., proximity to existing GRSG populations, ecological site potential, and resistance and resilience), documented in **Appendix H, Fire and Invasives Assessment Tool**.

In PHMA, prioritize restoration in seasonal habitats that are identified as the limiting factor for GRSG distribution and/or abundance.

Apply seasonal restrictions to avoid treating areas during seasons of use, as needed, when implementing vegetation treatments (see MA-SSS-3G).

In PHMA, avoid sagebrush reduction treatments within GRSG nesting and winter habitat unless the project plan and associated NEPA document demonstrate a biological need for the treatment to maintain or improve habitat for the GRSG population, or unless the treatment is for Utah prairie dog recovery where the needs of both species will be addressed on the landscape. Coordinate with the appropriate State of Utah agency and the USFWS prior to conducting sagebrush treatment projects within nesting and winter habitat.

Use collaborative planning efforts to develop and implement habitat restoration projects. Expertise and ideas from entities such as local landowners, local GRSG working groups, and other federal, state, county, and private organizations shall be solicited and considered in development of restoration projects.

In PHMA, implement project design features that will contribute to the most favorable conditions for success when planning and implementing restoration/vegetation treatment projects. Examples include, but are not limited to the following:

- Review of available plant species and their adaptation to the site when developing seed mixes.
- The need to reduce non-native annual grass densities and competition through herbicide, targeted grazing, tillage, etc.
- Assessment of on-site vegetation to ascertain if enough desirable perennial vegetation exists to consider the use of passive restoration techniques.

- Use of site preparation techniques that retain existing desirable vegetation.
- Use of “mother plant” techniques or planting of satellite populations of desirable plants to serve as seed sources.
- The need for post-treatment control of non-native annual grass and other invasive species.

Upon completion of vegetation treatments, monitor and manage the project area to ensure long-term success, including persistence of seeded species and/or other treatment components, such as implementing maintenance treatments.

MA-VEG-2: Remove conifers encroaching into sagebrush habitats, in a manner that considers tribal cultural values. When conducting conifer treatments:

- Prioritize treatments closest to occupied GRSG habitats and near occupied leks, and where juniper encroachment is phase I or phase II.
- Treat areas in late Phase II or Phase III condition to create movement corridors, connect habitats, or to break up continuous, hazardous fuels and reduce the potential for catastrophic fire.
- Prioritize methods to reduce conifer canopy cover to those that maintain the understory vegetation as the preferred treatment methods (e.g., mechanical, lop and scatter).
- Require that vegetation treatments conducted within 0.6 miles of a lek include an objective of reducing conifer, where technically feasible, to less than 5 percent canopy cover, with preference for complete removal.
- Include stipulations to avoid removing old-growth pinyon/juniper stands (e.g., Tausch et al. 2009; Miller et al. 1999).
- Use of site-specific analysis and tools like the Vegetation Dynamics Development Tool and the fire and invasives assessment tool report (Chambers et al. 2014) will help refine the location for specific areas to be treated.

MA-VEG-3: In PHMA manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. Also conserve or enhance these wet meadow complexes to maintain or increase amount of edge and cover within that edge.

MA-VEG-4: In PHMA, include GRSG habitat objectives in restoration/treatment projects. Include short-term and long-term habitat conditions in treatment objectives, including specific objectives for the establishment of sagebrush cover and height, as well as cover and heights for understory perennial grasses and forbs necessary for GRSG seasonal habitats (see Objective SSS-3).

Make meeting the GRSG objectives for the restoration/treatment project one of the primary priorities for the project and subsequent land uses, recognizing that managing for other special status species may result in treatment objectives that may not meet GRSG seasonal habitat objectives (e.g., winter habitat cover requirements versus creation of Utah prairie dog habitat). Where GRSG habitat overlaps with that of federally listed threatened or endangered species (e.g., Utah prairie dogs), coordinate with

species-specific experts to develop conservation and recovery objectives and allow habitat treatments that will benefit both species.

MA-VEG-5: In PHMA, prioritize the use of native seeds for restoration based on availability, adaptation (ecological site potential), and probability of success. Where probability of success or adapted seed availability is low, desirable non-native seeds may be used as long as they support GRSG habitat objectives. Re-establishment of appropriate sagebrush species/subspecies and important understory plants, relative to site potential, should be the principle objective for rehabilitation efforts.

MA-VEG-6: In PHMA, design post restoration management to ensure long term persistence. This could include changes in livestock grazing management, wild horse and burro management and travel management, etc., to achieve and maintain the desired condition of the restoration effort that benefits GRSG, as well as monitoring and maintaining the treated area.

MA-VEG-7: In PHMA, limit commercial seed or live plant collection to levels that ensure long-term maintenance of the GRSG habitat objectives. Locations, species allowed for collection, and limits on the amounts to be collected will be developed on a case-by-case basis following environmental review of annual site-specific conditions. Commercial collection during sensitive seasonal periods (see MA-SSS-3G) will include mitigation, developed to reflect the site-specific conditions on the ground, that could include, but is not necessarily limited to, restrictions on the timing and method of collection activities, limiting the number of individuals collecting, providing portions of collected seeds for use in local restoration projects, etc.

MA-VEG-8: In PHMA, allow for seed collection and use in restoration/reclamation activities. Prioritize use of seed from areas as close as possible to where the seed will be used to capture local adaptations.

MA-VEG-9: In PHMA, diversify the perennial grass and forb components through additional seeding in areas where historical seedings (e.g., crested wheatgrass) have been recolonized by sagebrush.

MA-VEG-10: Follow the applicable and technically feasible RDFs in **Appendix C** for vegetation projects/activities (fuels management) at the site-level unless at least one of the following can be demonstrated in the NEPA analyses associated with the project/activity:

- A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity;
- An alternative RDF, state-implemented conservation measure, or plan-level protection is determined to provide equal or better protection for GRSG or its habitat;
- A specific RDF will provide no additional protection to GRSG or its habitat.

MA-VEG-11: In PHMA, design post Emergency Stabilization and Rehabilitation/Burn Area Emergency Rehabilitation management to ensure long term persistence of seeded or pre-burn native plants. This may require temporary or long-term changes in livestock grazing, wild horse and burro, and travel management, etc., to achieve and maintain the desired condition of Emergency Stabilization and Rehabilitation projects to benefit GRSG (Eiswerth and Shonkwiler 2006).

Monitor and control invasive vegetation post-wildfire for at least 3 years.

MA-VEG-12: In PHMA, integrated Vegetation Management will be used to control, suppress, and eradicate noxious and invasive species per BLM Handbook H-1740-2.

MA-VEG-13: In PHMA, treatments of Mormon cricket outbreaks will be collaborated with partners at the federal, state, and local levels to maintain and enhance GRSG habitats.

MA-VEG-14: Treat areas that contain cheatgrass and other invasive or noxious species to minimize competition and favor establishment of desired species.

2.2.3 Fire and Fuels Management (FIRE)

Management Actions (MA)

MA-FIRE-1: In collaboration with the USFWS and relevant state agencies, complete and maintain GRSG Landscape Wildland Fire and Invasive Species Habitat Assessments to prioritize at risk habitats, and identify fuels management, preparedness, suppression and restoration priorities necessary to maintain sagebrush habitat to support interconnecting GRSG populations. These assessments and subsequent assessment updates will also be a collaborative effort to take into account other GRSG priorities identified in this plan. **Appendix H** describes a minimal framework example and suggested approach for this assessment.

Implementation actions will be tiered to the local GRSG Landscape Wildland Fire and Invasive Species Assessment, using best available science related to the conservation of GRSG.

In collaboration with USFWS and relevant state agencies, BLM planning units will identify annual treatment needs for wildfire and invasive species management as identified in local unit level Landscape Wildfire and Invasive Species Assessments. Annual treatment needs will be coordinated across state/regional scales and across jurisdictional boundaries for long-term conservation of GRSG.

Annually complete a review of landscape assessment implementation efforts with appropriate USFWS and state agency personnel.

Fuels Management

MA-FIRE-2: Follow the applicable and technically feasible RDFs in **Appendix C** for fuels management at the site-level unless at least one of the following can be demonstrated in the NEPA analyses associated with the project/activity:

- A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity;
- An alternative RDF, state-implemented conservation measure, or plan-level protection is determined to provide equal or better protection for GRSG or its habitat;
- A specific RDF will provide no additional protection to GRSG or its habitat.

MA-FIRE-3: In PHMA, fuel treatments will be designed through an interdisciplinary process to expand, enhance, maintain, or protect GRSG habitat.

- In collaboration with USFWS and relevant state agencies, BLM planning units with large blocks of GRSG habitat will develop, using the assessment process described in **Appendix H**, a fuels management strategy which considers an up-to-date fuels profile, land use plan direction, current and potential habitat fragmentation, sagebrush and GRSG ecological factors, and active vegetation management steps to provide critical breaks in fuel continuity, where appropriate. When developing this strategy, planning units will consider the risk of increased habitat fragmentation from a proposed action versus the risk of large scale fragmentation posed by wildfires if the action is not taken.
- Use green strips and/or fuel breaks to protect GRSG habitat from fire events.
- When possible, locate fuel breaks along existing roads, ROWs, and other suitable topographic or natural features (e.g., areas devoid of vegetation, rock outcrops).
- Avoid constructing fuel breaks through large areas of intact GRSG habitat, unless the associated NEPA document demonstrates a biological need for the fuel break to maintain or protect habitat for the GRSG population. Coordinate with the appropriate State of Utah agency and the USFWS prior to constructing fuel breaks within nesting and winter habitat.
- Using an interdisciplinary approach, a full range of fuel reduction techniques will be available. Fuel reduction techniques such as conifer reduction, grazing, prescribed fire, chemical, biological, and mechanical treatments may be acceptable, given site-specific variables.
- Remove encroaching conifer stands as a fuels management tool, where environmental review documents it protects or improves GRSG habitat.
- Prioritize the use of native seeds for fuels management treatment based on availability, adaptation (site potential), and probability of success. Where probability of success for native seed availability is low, desirable non-native seeds may be used to meet GRSG habitat objectives to trend toward restoring the fire regime. When reseeding, use fire resistant native and desirable non-native species, as appropriate, to provide for fire breaks.
- Upon project completion, monitor and manage fuels projects to ensure long-term success, including persistence of seeded species and/or other treatment components, such as implementing maintenance actions. Control invasive vegetation post-treatment.
- Apply seasonal restrictions, as needed, for implementing fuels management treatments according to the type of seasonal habitats present (see MA-SSS-3G).

In PHMA, avoid sagebrush reduction fuels treatments within GRSG nesting and winter habitat unless the project plan and associated NEPA document demonstrate a biological need for the treatment to maintain or improve habitat for the GRSG population, or unless the treatment is for Utah prairie dog recovery where the needs of both species will be addressed on the landscape. Treatments in winter habitat should be designed to maintain sagebrush, especially tall sagebrush (sagebrush capable of standing above heavier than normal snowfall), which will be available to GRSG above snow during a severe winter, considering the needs of Utah prairie dog recovery. Prior to conducting fuels treatments in winter habitat, coordinate with the appropriate State of Utah agency and the USFWS to design the treatment to strategically reduce wildfire risk around or in the winter habitat.

MA-FIRE-4: If prescribed fire is used in GRSG habitat, the NEPA analysis for the Burn Plan will address:

- why alternative techniques were not selected as a viable options;
- how GRSG goals and objectives will be met by its use;
- how the COT Report objectives will be addressed and met;
- a risk assessment to address how potential threats to GRSG habitat will be minimized.

Prescribed fire as a vegetation or fuels treatment shall only be considered after the NEPA analysis for the Burn Plan has addressed the four bullets outlined above. Prescribed fire may be used to meet specific fuels objectives that will protect GRSG habitat in PHMA (e.g., creation of fuel breaks that will disrupt the fuel continuity across the landscape in stands where annual invasive grasses are a minor component in the understory, burning slash piles from conifer reduction treatments, used as a component with other treatment methods to combat annual grasses and restore native plant communities), as well as managing the landscape for GRSG in concert with Utah prairie dog.

Prescribed fire in known winter range shall only be considered after the NEPA analysis for the Burn Plan has addressed the four bullets outlined above. Any prescribed fire in winter habitat will need to be designed to strategically reduce wildfire risk around and/or in the winter range and designed to protect winter range habitat quality.

MA-FIRE-5: In PHMA, during fuels management project design, consider the use of targeted livestock grazing to strategically reduce fine fuels and, if used, implement grazing management that will accomplish this objective. If implementing targeted grazing, implement measures to minimize impacts on native perennial grasses.

Pre-Suppression

MA-FIRE-6: Follow the applicable and technically feasible RDFs in **Appendix C** for fire and fuels management at the site-level unless at least one of the following can be demonstrated in the NEPA analyses associated with the project/activity:

- A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity;
- An alternative RDF, state-implemented conservation measure, or plan-level protection is determined to provide equal or better protection for GRSG or its habitat;
- A specific RDF will provide no additional protection to GRSG or its habitat.

Implement a coordinated inter-agency approach to fire restrictions based upon National Fire Danger Rating System thresholds (fuel conditions, drought conditions and predicted weather patterns) for GRSG habitat.

Develop wildfire prevention plans that explain the resource value of GRSG habitat and include fire prevention messages and actions to reduce human-caused ignitions.

Suppression

MA-FIRE-7: Follow the applicable and technically feasible RDFs in **Appendix C** for fire and fuels management at the site-level unless at least one of the following can be demonstrated in the NEPA analyses associated with the project/activity:

- A RDF is documented to not be applicable to the site-specific conditions of the project/activity;
- An alternative RDF, state-implemented conservation measure, or plan-level protection is determined to provide equal or better protection for GRSG or its habitat;
- A specific RDF will provide no additional protection to GRSG or its habitat.

MA-FIRE-8: The protection of human life is the single, overriding priority. Setting priorities among protecting human communities and community infrastructure, other property and improvements, and natural and cultural resources will be done based on the values to be protected, human health and safety, and the costs of protection. GRSG habitat in PHMA will be prioritized commensurate with property values and other critical habitat to be protected, with the goal to restore, enhance, and maintain areas suitable for GRSG across the range of GRSG habitat consistent with LUP direction.

PHMA will be viewed as more valuable than GHMA when priorities are established. When suppression resources are widely available, maximum efforts will be placed on limiting fire growth in GHMA polygons as well. These priority areas will be further refined following completion of the GRSG Landscape Wildland Fire Invasive Species Habitat Assessments described in **Appendix H**.

In GHMA or areas where treatment/seeding has occurred to improve habitat, prioritize suppression where wildfires threaten adjacent PHMA.

MA-FIRE-9: Within acceptable risk levels use a full range of fire management strategies and tactics, including the management of wildfires to achieve resource objectives, across the range of GRSG habitat consistent with LUP direction.

In PHMA, burnout operations areas should be avoided by constructing direct fire lines, whenever safe and practical to do so.

2.2.4 Livestock Grazing/Range Management (LG)

Management Actions (MA)

MA-LG-1: PHMA and GHMA will be available for livestock grazing (**Figure 2-3, Livestock Grazing [Appendix A]**). Active animal unit months (AUMs) for livestock grazing will be 329,521 on BLM lands. Make adjustments to permitted AUMs consistent with regulation and the remaining grazing direction. In addition, on an annual basis livestock numbers and the season of use can be adjusted within the terms and conditions of the permit.

Make adjustments to permitted use and annual adjustments to levels of livestock use consistent with regulation and the direction identified below where livestock grazing is identified as a causal factor to not meeting standards or habitat objectives.

MA-LG-2: The BLM will prioritize (1) the review of grazing permits/leases, in particular to determine if modification is necessary prior to renewal, and (2) the processing of grazing permits/leases in SFA first followed by PHMA outside SFA. In setting workload priorities, precedence will be given to existing permits/leases in these areas not meeting Land Health Standards, with focus on those containing riparian areas, including wet meadows. The BLM may use other criteria for prioritization to respond to urgent natural resource concerns (ex., fire) and legal obligations.

MA-LG-3: In PHMA, consult, cooperate, and collaborate with other land owners and management agencies (e.g., private and SITLA) to develop plans which provide for landscape level approaches to habitat improvement. Manage unfenced private and SITLA lands within a grazing allotment that are under exchange of use agreements or percent public land use as a single unit that will have the same management as the public lands.

MA-LG-4: Evaluate Utah's Rangeland Health Standards and process grazing permits. Focus monitoring and management activities on allotments found not to be achieving Utah's Rangeland Health Standards where livestock grazing is identified as a causal factor and that have the best opportunities for conserving, enhancing or restoring habitat for GRSG.

Use ecological site descriptions and/or other appropriate information to determine the desired plant community within proper functioning ecological processes for conducting land health assessments to evaluate the achievement or non-achievement of rangeland health standards.

MA-LG-5: In PHMA and GHMA, conduct land health assessments that include indicators and measurements of structure, condition, composition, etc., of vegetation specific to achieving GRSG habitat objectives (Objective SSS-3), including within wetlands and riparian areas. Prioritize land health assessments in SFA, followed by PHMA outside of the SFA. Conduct land health assessments at the watershed scale and use the GRSG habitat objectives when assessing the applicable standard in GRSG habitats.

MA-LG-6: In PHMA, when livestock management practices are determined to not be compatible with meeting or making progress towards achievable habitat objectives following appropriate consultation, cooperating and coordination, implement changes in grazing management through grazing authorization modifications, or allotment management plan implementation. Potential modifications include, but are not limited to, changes in:

- Season or timing of use;
- Numbers of livestock;
- Distribution of livestock use;
- Duration and/or level of use;
- Kind of livestock (e.g., cattle, sheep, horses, or goats); and
- Grazing schedules (including rest or deferment).

**Not in priority order*

The NEPA analysis for renewals and modifications of livestock grazing permits/leases that include lands within SFA and PHMA will include specific management thresholds based on **Table 2-2**, Land Health Standards (43 CFR, Part 4180.2), and ecological site potential, and one or more defined responses that will allow the authorizing officer to make adjustments to livestock grazing that have already been subjected to NEPA analysis. Adjustments to meet seasonal GRSG habitat requirements could include those items identified in the list above.

MA-LG-7: In PHMA, during drought periods, prioritize evaluating effects of the drought relative to GRSG needs for food and cover.

Initiate emergency management measures (e.g. delaying turnout, adjusting the amount and/or duration of livestock grazing, implement other terms of the permit) during times of drought to protect GRSG habitat, in accordance with Instruction Memorandum 2013-094 (Resource Management During Drought), or other agency policies.

Implement post-drought management to allow for vegetation recovery that meets GRSG needs.

MA-LG-8: In PHMA, manage riparian areas and wet meadows for proper functioning condition.

MA-LG-9: In PHMA, assess livestock grazing in riparian and meadow complexes and ensure recovery or maintenance of appropriate vegetation and water quality. Where recovery or maintenance is not occurring and the causal factor is livestock grazing, reduce pressure on riparian or wet meadow vegetation used by GRSG in the summer by adjusting grazing management practices (e.g., use fencing/herding techniques, or changes in seasonal use or livestock distribution).

Allotments within SFA, followed by those within PHMA, and focusing on those containing riparian areas, including wet meadows, will be prioritized for field checks to help ensure compliance with the terms and conditions of the grazing permits. Field checks could include monitoring for actual use, utilization, and use supervision.

MA-LG-10: In PHMA, limit authorization of new water developments to projects that have a neutral effect or are beneficial to GRSG habitat (such as by shifting livestock use away from critical areas). New developments that divert surface water must be designed to maintain riparian or wet meadow vegetation and hydrology to meet GRSG needs.

MA-LG-11: In PHMA, evaluate existing water developments (springs, seeps, etc., and their associated pipelines) to determine if modifications are necessary to maintain or improve riparian areas and GRSG habitat. Make modifications where necessary, considering impacts on other water uses when such considerations are neutral or beneficial to GRSG.

MA-LG-12: In PHMA, ensure that vegetation treatments conserve, enhance or restore GRSG habitat (this includes treatments that benefit livestock).

MA-LG-13: In PHMA, evaluate the role of existing seedings that are currently composed of primarily introduced perennial grasses to determine if they should be restored to sagebrush or habitat of higher quality for GRSG. If existing seedings provide value in conserving or enhancing GRSG habitats, then no

restoration will be necessary. Assess the compatibility of these seedings for GRSG habitat during the land health assessments.

MA-LG-14: In PHMA, design new structural range improvements to have a neutral effect or conserve, enhance, or restore GRSG habitat through an improved grazing management system relative to GRSG objectives. Structural range improvements, in this context, include but are not limited to: cattle guards, fences, exclosures, corrals or other livestock handling structures; pipelines, troughs, storage tanks (including moveable tanks used in livestock water hauling), windmills, ponds/reservoirs, solar panels and spring developments. Potential for invasive species establishment or increase following construction must be considered in the project planning process and monitored and treated post-construction.

MA-LG-15: In PHMA, evaluate existing structural range improvements to make sure they have a neutral effect or conserve, enhance or restore GRSG habitat.

MA-LG-16: To reduce outright GRSG strikes and mortality, remove, modify or mark fences in high risk areas (Stevens et al. 2012) based on proximity to lek (e.g., within 1.2 miles of a lek), lek size, and topography, or as latest science indicates. Prioritize actions in SFA first, then PHMA.

Employ NRCS fence collision risk tool (NRCS/CEAP Conservation Insight Publication “Applying the Sage Grouse Fence Collision Risk Tool to Reduce Bird Strikes”).

MA-LG-17: In PHMA, monitor for and treat noxious weeds and treat invasive species where needed, associated with existing range improvements.

MA-LG-18: At the time a permittee or lessee voluntarily relinquishes a permit or lease, the BLM will consider whether the public lands where that permitted use was authorized should remain available for livestock grazing or be used for other resource management objectives, such as reserve common allotments or fire breaks. This does not apply to or impact grazing preference transfers, which are addressed in 43 CFR, Part 4110.2-3.

2.2.5 Wild Horses and Burros (WHB)

Management Actions (MA)

MA-WHB-1: Manage HMAs in GRSG habitat within established appropriate management level ranges to achieve and maintain GRSG habitat objectives (Objective SSS-3).

MA-WHB-2: Complete rangeland health assessments for HMAs containing GRSG habitat using an interdisciplinary team of specialists (e.g. range, wildlife, and riparian). The priorities for conducting assessments are:

1. HMAs containing PHMA;
2. HMAs containing only GHMA;
3. HMAs containing sagebrush habitat outside of PHMA and GHMA mapped habitat; and
4. HMAs without GRSG habitat.

MA-WHB-3: Prioritize gathers and population growth suppression techniques in HMAs in GRSG habitat, unless removals are necessary in other areas to address higher priority environmental issues, including herd health impacts.

MA-WHB-4: In PHMA, assess and adjust appropriate management levels through the NEPA process within HMAs when wild horses or burros are identified as a significant causal factor in not meeting land health standards, even if current appropriate management levels are not being exceeded.

MA-WHB-5: In PHMA, monitor the effects of WHB use in relation to GRSG seasonal habitat objectives on an annual basis to help determine future management actions.

MA-WHB-6: Develop or amend herd management plans to incorporate GRSG habitat objectives and management considerations for all HMAs within GRSG habitat, with an emphasis placed on PHMA.

MA-WHB-7: Consider removals or exclusion of wild horses/burros during or immediately following emergency situations (such as fire, floods, and drought) to facilitate meeting GRSG habitat objectives where HMAs overlap with GRSG habitat.

MA-WHB-8: When conducting NEPA analysis for wild horse/burro management activities, water developments, or other rangeland improvements for wild horses, address the direct and indirect effect on GRSG populations and habitat. Implement any water developments or rangeland improvements using the criteria identified for domestic livestock.

MA-WHB-9: Coordinate with professionals from other federal and state agencies, researchers at universities, and others to utilize and evaluate new management tools (e.g., population growth suppression, inventory techniques, and telemetry) for implementing the wild horse and burro program.

2.2.6 Minerals Resources (MR)

Management Actions (MA)

MA-MR-1: Allow exploration for all minerals (e.g., geophysical, trenching, drilling, etc.) within mapped occupied GRSG habitat areas that are not closed to leasing, permitting, etc., to obtain exploratory information. In areas where leasing, permitting, etc. is still available, minerals exploration shall be subject to the pertinent management for discretionary activities in PHMA (MA-SSS-3) and GHMA (MA-SSS-5).

Fluid Minerals

Objective MR-1: Priority will be given to leasing and development of fluid mineral resources, including geothermal, outside of PHMA and GHMA. When analyzing leasing and authorizing development of fluid mineral resources, including geothermal, in PHMA and GHMA, and subject to applicable stipulations for the conservation of GRSG, priority will be given to development in non-habitat areas first and then in the least suitable habitat for GRSG. The implementation of these priorities will be subject to valid existing rights and any applicable law or regulation, including, but not limited to, 30 USC 226(p) and 43 CFR, Part 3162.3-1(h).

Objective MR-2: Where a proposed fluid mineral development project on an existing lease could adversely affect GRSG populations or habitat, the BLM will work with the lessees, operators, or other project proponents to avoid, minimize, and compensate for adverse impacts on the extent compatible

with lessees' rights to drill and produce fluid mineral resources. The BLM will work with the lessee, operator, or project proponent in developing an application for permit to drill for the lease to avoid, minimize, and compensate for impacts on GRSG or its habitat and will ensure that the best information about the GRSG and its habitat informs and helps to guide development of such federal leases.

Management Actions (MA)

MA-MR-2: Manage fluid mineral leasing in PHMA as follows (**Figure 2-4**, Fluid Minerals [Oil and Gas] **[Appendix A]**) (**Appendix G**, Stipulations Associated with Fluid Mineral Leasing):

- open to leasing, subject to standard stipulations: 0 acres
- open to leasing, subject to CSU and/or TL stipulations: 23,600 acres
- open to leasing, subject to NSO stipulations: 3,229,600 acres
- closed to leasing: 111,900 acres

Unleased Federal Fluid Mineral Estate

MA-MR-3:

Unleased Areas within PHMA

PHMA will be designated as open to leasing fluid minerals, subject to NSO stipulations.

In SFA, there will be no waivers, exceptions, or modifications. In the remainder of PHMA, no waivers or modifications to a fluid mineral lease no-surface-occupancy stipulation will be granted. The Authorized Officer may grant an exception to a fluid mineral lease no-surface-occupancy stipulation only where the proposed action:

- Would not have direct, indirect, or cumulative effects on GRSG or its habitat; or,
- Is proposed to be undertaken as an alternative to a similar action occurring on a nearby parcel, and would provide a clear conservation gain to GRSG.

Exceptions based on conservation gain (ii) may only be considered in (a) PHMA of mixed ownership where federal minerals underlie less than fifty percent of the total surface, or (b) areas of the public lands where the proposed exception is an alternative to an action occurring on a nearby parcel subject to a valid federal fluid mineral lease existing as of the date of this ARMPA. Exceptions based on conservation gain must also include measures, such as enforceable institutional controls and buffers, sufficient to allow the BLM to conclude that such benefits will endure for the duration of the proposed action's impacts.

Any exceptions to this lease stipulation may be approved by the Authorized Officer only with the concurrence of the State Director. The Authorized Officer may not grant an exception unless the applicable state wildlife agency, the USFWS, and the BLM unanimously find that the proposed action satisfies (i) or (ii). Such finding shall initially be made by a team of one field biologist or other GRSG expert from each respective agency. In the event the initial finding is not unanimous, the finding may be elevated to the appropriate BLM State Director, USFWS State Ecological Services Director, and state wildlife agency head for final resolution. In the event their finding is not unanimous, the exception will not be granted. Approved exceptions will be made publically available at least quarterly.

In addition, any lease activities will apply the pertinent management for discretionary activities in PHMA identified in MA-SSS-3 (e.g., mitigation, disturbance cap, minerals/energy density, buffers, seasonal restrictions, and RDFS).

Outside PHMA, portions of opportunity areas within 4 miles of a lek that is located in PHMA will be open for leasing with CSU stipulations (avoiding noise and tall structures that could affect adjacent GRSG use of PHMA).

MA-MR-4:**Unleased Areas within GHMA**

Manage fluid mineral leasing in GHMA as follows (**Figure 2-4**):

- open to leasing, subject to standard stipulations: 238,700 acres
- open to leasing, subject to CSU and/or TL stipulations: 294,200 acres
- open to leasing, subject to NSO stipulations: 32,700 acres
- closed to leasing: 28,400 acres
- planning decision not mapped: 133,400 acres

In GHMA, new development of fluid mineral leases could be considered if they apply the pertinent management for discretionary activities in GHMA identified in MA-SSS-5.

Leased Federal Fluid Mineral Estate

MA-MR-5: Apply the following conservation measures through implementation decisions (e.g., approval of an application for permit to drill, geothermal drilling permit, Sundry Notice, Master Development Plans, etc.) and upon completion of the environmental record of review (43 CFR, Part 3162.5). In this process, evaluate whether the conservation measures are “reasonable” (43 CFR, Part 3101.1-2) with the valid existing rights.

MA-MR-6: In PHMA, avoid, minimize, and compensate for impacts on GRSG and their habitat (e.g., habitat loss, fragmentation, indirect impacts, etc.) from new oil and gas development on existing leases.

Where possible, place development outside of PHMA. If it is determined that this restriction renders the recovery of fluid minerals infeasible or uneconomic, considering the lease as a whole, or where development of existing leases requires that disturbance density exceeds 1 per 640, and/or 3 percent disturbance cap, apply other measures to site proposed lease activities to meet GRSG habitat objectives and require mitigation as described in **Appendix F**. If the lease is entirely within PHMA, if feasible, apply the lek buffers from MA-SSS-3H. If this is not technically feasible, locate infrastructure in areas that will minimize habitat loss. Require any development to be placed at the most distal part of the lease from the lek or in areas least harmful to GRSG populations and habitat (e.g., areas where local terrain features such as ridges and ravines may reduce habitat importance or shield nearby habitat from disruptive factors).

For geophysical exploration activities, include seasonal TLs and RDFS as permit conditions of approval to eliminate or minimize surface-disturbing and disruptive activities within nesting and brood-rearing habitat and winter concentration areas.

MA-MR-7: To the extent consistent with existing lease-rights, apply the pertinent management for discretionary activities in PHMA identified in MA-SSS-3 (e.g., mitigation, disturbance cap, minerals/energy density, buffers, seasonal restrictions, and RDFS) and in GHMA identified in MA-SSS-5 (i.e., mitigation, buffers, and RDFS).

MA-MR-8: In PHMA, operators must submit a master development plan with site-specific plans of development for roads, wells, pipelines and other infrastructure prior to any development being authorized. The BLM will evaluate the plan through the NEPA process.

MA-MR-9: In PHMA, encourage unitization when deemed necessary for proper development and operation of an area (with strong oversight and monitoring) to minimize adverse impacts on GRSG according to the Federal Lease Form, 3100-11, Sections 4 and 6.

MA-MR-10: In PHMA, identify areas where acquisitions (including federal mineral rights) or conservation easements, will benefit GRSG habitat.

MA-MR-11: In PHMA, require a full reclamation bond specific to the site in accordance with 43 CFR, Parts 3104.2, 3104.3, 3104.5, and 36 CFR, Part 228.109. Insure bonds are sufficient for costs relative to reclamation that will result in full restoration of the lands to the condition it was found prior to disturbance. Base the reclamation costs on the assumption that contractors will perform the work.

Locatable Minerals

MA-MR-12: SFA will be recommended for withdrawal from the Mining Law of 1872 (as amended), subject to valid existing rights (**Figure 2-5**, Locatable Minerals [**Appendix A**]).

Other federal lands or non-federal lands with federal mineral interests within PHMA or GHMA that are not already withdrawn will be available for locatable mineral entry. Areas that are recommended for withdrawal will continue to be managed as they are currently managed.

In PHMA, to the extent consistent with the rights of a mining claimant under existing laws and regulations, limit surface disturbance from locatable mineral development and apply management to minimize and mitigate impacts. To the extent allowable by law, work with claimants to voluntarily apply the pertinent management for discretionary activities in PHMA identified in MA-SSS-3 (e.g., mitigation, disturbance cap, minerals/energy density, buffers, seasonal restrictions, and RDFS) and in GHMA identified in MA-SSS-5 (i.e., mitigation and buffers).

Regardless of whether agreements with the claimant incorporates the 3 percent disturbance cap (MA-SSS-3B), disturbance from locatable mineral development will be included as disturbance when calculating disturbance for other land uses.

Saleable Minerals

MA-MR-13: In PHMA, manage mineral materials as follows (**Figure 2-6**, Salable Minerals [Mineral Materials] [**Appendix A**]):

- open to mineral materials development: 0 acres
- closed to mineral materials development: 2,587,100 acres

MA-MR-14: Close PHMA to new mineral material sales. However, these areas remain “open” to free use permits and the expansion of existing active pits, only if the following criteria are met at all phases of the development (construction and long-term operation of facilities):

- the activity is within the population area (BSU) and project area disturbance cap (MA-SSS-3B);
- the activity is subject to the provisions set forth in the mitigation framework (MA-SSS-3A);
- all applicable RDFs are applied (MA-SSS-3I); and
- the activity applies the other pertinent management for discretionary activities in PHMA in MA-SSS-3.

In GHMA, new mineral material developments can be considered if consistent with the pertinent management for discretionary activities described in MA-SSS-5.

Non-Energy Leasable Minerals

MA-MR-15: In PHMA, manage nonenergy leasable minerals on federal lands and non-federal lands with federal mineral interests as follows (**Figure 2-7, Non-Energy Leasable Minerals [Appendix A]**):

- Open to Leasing Consideration – 24,800 acres (National Forest System lands in Wyoming)
- Closed to Leasing – 3,340,200 acres

In PHMA, close federal lands and non-federal lands with federal mineral interests to nonenergy leasable mineral leasing. However, expansion of existing operations could be considered if the new lease is contiguous with an existing operation and the new lease (construction, operation, or maintenance) applies the pertinent management for discretionary activities in PHMA identified in MA-SSS-3 (e.g., mitigation, disturbance cap, minerals/energy density, buffers, seasonal restrictions, and RDFs).

MA-MR-16: In GHMA, manage nonenergy leasable minerals on federal lands and non-federal lands with federal mineral interests as follows (**Figure 2-7**):

- Open to Leasing Consideration – 699,300 acres
- Closed to Leasing – 28,200 acres

New leasing and development in GHMA can be considered if consistent with the pertinent management for discretionary activities described in MA-SSS-5.

MA-MR-17: In PHMA, exploration and prospecting activities associated with nonenergy leasable minerals will be required to comply with the same stipulations identified for leasing and development, above. In addition:

- The exploration/prospecting activity does not occur during sensitive seasonal periods (i.e., breeding and nesting, brood rearing, winter) (MA-SSS-3G).

- Facilities associated with exploration/prospecting activities will be removed before the next breeding season.
- Disturbances will be restored.

Coal

MA-MR-18:

Leases Associated with Surface Mining

At the time an application for a new coal lease or lease modification is submitted to the BLM, the BLM will determine whether the lease application area is "unsuitable" for all or certain coal mining methods pursuant to 43 CFR, Part 3461.5. PHMA is essential habitat for maintaining GRSG for purposes of the suitability criteria set forth at 43 CFR, Part 3461.5(o)(1).

MA-MR-19:

Leases Associated with Underground Mining

Consider leasing PHMA for coal that will be extracted through underground mining. Require the following stipulations as part of any new lease or lease modification:

- In PHMA, appurtenant facilities will not be placed in GRSG habitat, where technically feasible.
- In PHMA, if placement of facilities outside of GRSG habitat is not technically feasible, disturbances associated with the lease (construction, operation, or maintenance) can be allowed if they are consistent with the pertinent management for discretionary activities identified in MA-SSS-3 (e.g., mitigation, disturbance cap, minerals/energy density, buffers, noise restrictions, seasonal restrictions, etc.).

If the above criteria cannot be met, do not grant new leases or modifications.

MA-MR-20: New leasing for underground mining of coal in GHMA can be considered if consistent with the pertinent management for discretionary activities described in MA-SSS-5.

MA-MR-21: In PHMA, exploration activities needed to meet data adequacy standards associated with potential coal leasing will be required to comply with the pertinent management for discretionary activities identified in MA-SSS-3 (e.g., mitigation, disturbance cap, buffers, noise restrictions, seasonal restrictions, etc.).

MA-MR-22: For underground coal mining operations on existing leases: In PHMA, unless required for technical or safety reasons, do not authorize new appurtenant surface facilities for existing underground mining. If new appurtenant surface facilities associated with the existing mine leases cannot be located outside of PHMA, collocate them with any existing disturbed areas, if possible. If collocation is not possible, then construct new facilities to minimize disturbed areas while meeting mine safety standards/requirements, as identified by Mine Safety and Health Administration mine-plan approval process, and locate the facilities in an area least harmful to GRSG habitat based on vegetation, topography, or other habitat features.

MA-MR-23: For coal mining operations on existing leases: In GHMA, new disturbances could be considered if consistent with the pertinent management for discretionary activities described in MA-SSS-5.

Mineral Split Estate

MA-MR-24: Where the federal government manages the mineral estate in PHMA and GHMA, and the surface is in non-federal ownership, apply the same stipulations, conditions of approval, and/or conservation measures and RDFS applied if the mineral estate is developed on BLM-administered lands in that management area, to the maximum extent permissible under existing authorities, and in coordination with the landowner.

Where the federal government manages the surface and the mineral estate is in non-federal ownership in PHMA and GHMA, apply appropriate surface use conditions of approval, stipulations, and mineral RDFS through ROW grants or other surface management instruments, to the maximum extent permissible under existing authorities, in coordination with the mineral estate owner/lessee.

2.2.7 Renewable Energy (Wind and Solar) (RE)

Management Actions (MA)

Wind Energy Development

MA-RE-1: PHMA will be designated as exclusion areas for wind energy development (2,026,400 acres) (**Figure 2-8, Wind [Appendix A]**).

Do not site wind energy development in opportunity areas within 5 miles from occupied GRSG leks that are in PHMA.

Manage wind energy development in GHMA as follows:

- Open – 484,900 acres
- Avoided – 0 acres
- Excluded – 17,600 acres

New wind ROW authorizations can be allowed in GHMA if they apply the pertinent management for discretionary activities identified in MA-SSS-5.

Solar Energy Development

The BLM's Approved Resource Management Plan Amendments/ROD for Solar Energy Development in Six Southwestern States (October 2012) excluded all GRSG occupied habitat to new utility-scale solar development. Because the existing land use plans already exclude solar development in GRSG habitat; this plan amendment process does not need to make additional decisions related to solar development (**Figure 2-9, Solar [Appendix A]**).

2.2.8 Lands and Realty (LR)

Objective LR-I: Effects of infrastructure projects, including siting, will be minimized using the best available science, updated as monitoring information on current infrastructure projects becomes available.

Management Actions (MA)

MA-LR-1: In PHMA, manage lands ROWs, permits, and leases as follows (**Figure 2-11, Rights-of-Way [Appendix A]**):

- Open: 18,900 acres (associated with designated above-ground ROW corridors)
- Avoided: 1,997,000 acres
- Excluded: 10,500 acres

MA-LR-2:

Linear and Site-Type ROWs, Permits, and Leases (excluding wind and solar)

PHMA will be avoidance areas for new linear and site type ROWs, permits, and leases except for within ROW corridors designated for aboveground use. Placement of new ROWs, permits, and leases in PHMA shall be avoided if at all possible. Where avoidance is not possible in PHMA, placement of a new ROW/permit/lease can be allowed if it applies the management for discretionary activities in PHMA identified in MA-SSS-3 (e.g., mitigation, disturbance cap, buffers, tall structure restrictions, seasonal restrictions, and applicable RDFs).

In PHMA, lands ROWs, permits and leases that cannot be avoided shall be located in areas that minimize the effect on the GRSG population (e.g., non-habitat areas, least suitable habitat, collocated with existing disturbances).

In PHMA, new proposals for power lines, access roads, pump storage, and other hydroelectric facilities licensed by Federal Energy Regulatory Commission will be subject to all GRSG ROW avoidance allocations and pertinent management for discretionary activities in MA-SSS-3.

Outside PHMA, portions of opportunity areas within 4-miles of a lek that is located in PHMA will be avoidance areas for new ROWs, permits and leases, applying stipulations for noise and tall structures.

In addition to the above requirements, the subsequent conditions will apply to specific types of ROW authorizations:

Transmission Lines

PHMA are designated as avoidance areas for high voltage transmission line ROWs, except for the transmission projects specifically identified below. All authorizations in these areas, other than the following identified projects, must comply with the conservation measures outlined in this plan, including the RDFs and avoidance criteria presented in MA-SSS-03. The BLM is currently processing an application for TransWest Express (including those portions of Energy Gateway South that are collocated) and the NEPA review for this project is well underway. Conservation measures for GRSG are being analyzed

through the project's NEPA review process, which should achieve a net conservation benefit for the GRSG.

In PHMA, high voltage transmission lines (100 kilovolt or greater) will be avoided if possible. If avoidance is not possible, they will be placed in designated corridors where technically feasible. Where not technically feasible, lines should be located adjacent to existing infrastructure, unless using a different alignment better minimizes impacts on GRSG. New ROWs constructed adjacent to existing infrastructure will be constructed as close as technically feasible to existing infrastructure to limit disturbance to the smallest footprint.

In PHMA outside of designated corridors, new transmission lines must be buried where technically feasible. Where burying transmission lines is not technically feasible:

- new transmission lines must be located adjacent to existing infrastructure, unless using a different alignment better minimizes impacts on GRSG; and
- they will be subject to GRSG ROW avoidance criteria described above.

In PHMA, if an existing transmission line is being upgraded to a higher voltage transmission line outside an existing corridor:

- the existing transmission line must be removed within a reasonable amount of time after the new line is installed and energized; and
- the new line must be constructed in the same alignment as the existing line unless an alternate route will benefit GRSG or GRSG habitat.

In PHMA, where existing guy wires are determined to have a negative impact on GRSG or its habitat, they shall be removed or appropriately marked with bird flight diverters to make them more visible to GRSG in flight.

Pipelines

In PHMA, major pipelines (greater than 24 inches) that cannot avoid PHMA will be placed in designated corridors where technically feasible. Where not technically feasible, pipelines shall be located adjacent to existing infrastructure, unless using a different alignment better minimizes impacts on GRSG.

Communication Sites

In PHMA, new communication towers that cannot avoid PHMA must be located, where technically feasible, within an existing communication site. New sites will be considered where necessary for public safety.

MA-LR-3:

Road ROWs

In PHMA, new road ROWs will be authorized when necessary for public safety, administrative access, or subject to valid existing rights. If the new ROW is necessary for public safety, administrative access, or subject to valid existing rights and creates new surface disturbance, then avoid, minimize, and compensate for the impacts.

In PHMA, limit route construction to realignments of existing ROWs if the realignment maintains or enhances GRSG habitat, eliminates the need to authorize a new ROW to construct a new road, or is necessary for public safety or public need.

In PHMA, subject to valid existing rights, new road ROWs/easements will be authorized only when necessary for public safety or administrative access or, if it creates no new or de minimis new surface disturbance.

In PHMA, collocate new ROWs as close as technically possible to existing ROWs or where it best minimizes GRSG impacts. Use existing roads, or realignments, to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to the absolute minimum standard necessary.

In PHMA, existing Federal Highway Act Appropriation ROWs will be managed as valid existing rights, and new Federal Highway Act ROWs will continue to be considered and subject to all GRSG ROW plan restrictions.

MA-LR-4: In PHMA, designate ROW corridors as identified on **Figure 2-10, Designated Utility Corridors [Appendix A]**:

- Retain 17,600 acres of existing designated ROW corridor
- Retain 44,300 acres of existing designated ROW corridor, but stipulate new developments be limited to underground use only
- Undesignate 18,200 acres of existing designated ROW corridor

In PHMA, placement of new ROWs in corridors should be avoided if at all possible. Where avoidance is not possible:

- Allow new linear ROWs in designated corridors.
- New ROWs constructed in designated corridors will be constructed as close as technically feasible to existing linear ROW infrastructure to limit disturbance to the smallest footprint, unless using a different alignment better minimizes impacts on GRSG.
- Apply the pertinent management for discretionary activities in PHMA identified in MA-SSS-3.

MA-LR-5: In PHMA, when a ROW grant expires, is relinquished, or terminated, required rehabilitation as a term and condition of the FLPMA ROW grant, in compliance with 43 CFR, Part 2805.12(i).

- the lease holder will be required to restore the site by removing overhead lines and other infrastructure, and;
- eliminate existing raven nesting opportunities created by anthropogenic development on public lands (e.g., remove power line and communication facilities no longer in service).

In PHMA, during renewal, amendment or reauthorization of existing permits, work with existing ROW holders to mitigate impacts of existing ROW infrastructure. Where technically feasible, require ROW holders to bury or relocate existing power lines to minimize long-term impacts on GRSG habitat.

Where the potential long-term impacts of relocating or burying the line will be greater than the existing impacts, do not pursue the mitigation. If relocation or burying is not feasible or will result in severe short-term or greater long-term impacts on GRSG habitat, incorporate additional terms and conditions in the ROW authorization for protection of GRSG habitat.

Work with ROW holders to retrofit existing towers with perch deterrents or other anti-perching devices, where appropriate, to limit GRSG predation.

MA-LR-6: In PHMA, where existing leases or ROWs have had some level of development (road, fence, well, etc.) and are no longer in use, remove the features and restore the habitat.

MA-LR-7: In GHMA, manage ROWs, permits, and leases as follows (**Figure 2-11**):

- Open: 484,900 acres
- Avoided: 0 acres
- Excluded: 17,600 acres

New ROWs (including permits and leases) authorizations will be allowed if they apply the pertinent management for discretionary activities in GHMA identified in MA-SSS-5.

MA-LR-8: In GHMA, retain 74,700 acres of designated ROW corridors as identified on **Figure 2-10**.

Land Tenure

MA-LR-9: Lands classified as PHMA and GHMA for GRSG will be retained in federal management (**Figure 2-12, Land Tenure [Appendix A]**) unless: (1) the agency can demonstrate that disposal of the lands, including land exchanges, will provide a net conservation gain to the GRSG or (2) the agency can demonstrate that the disposal of the lands, including land exchanges, will have no direct or indirect adverse impact on conservation of the GRSG.

MA-LR-10: In PHMA, where suitable conservation actions cannot be achieved, seek to acquire state and private lands with intact federal mineral estate by donation, purchase or exchange in order to best conserve, enhance or restore GRSG habitat.

Recommended Withdrawals

MA-LR-11: SFA will be recommended for withdrawal from the Mining Law of 1872 (as amended), subject to valid existing rights. Other federal lands or non-federal lands with federal mineral interests within PHMA or GHMA that are not already withdrawn or recommended for withdrawal will be available for locatable mineral entry (**Figure 2-5**).

2.2.9 Recreation (REC)

Management Actions (MA)

MA-REC-1: In PHMA, only allow BLM SRPs that have neutral or beneficial effect on GRSG and their habitat. Evaluate existing SRPs for adverse effect on GRSG and their habitat. Modify or cancel the permit, as appropriate and where possible to avoid or mitigate effects of habitat alterations or other physical disturbances to GRSG (e.g., breeding, brood-rearing, migration patterns, or winter survival).

Identify permit stipulations that require the permittee to implement any necessary habitat restoration activities after SRP events. Restoration activities must be consistent with GRSG habitat objectives.

MA-REC-2: In PHMA, do not construct new recreation facilities (e.g., campgrounds, trailheads, staging areas) unless the development will have a net conservation gain to GRSG habitat (such as concentrating recreation, diverting use away from critical areas, etc.), or unless the development is required for visitor health and safety or resource protection.

2.2.10 Travel and Transportation Management (TTM)

Management Actions (MA)

MA-TTM-1: Manage off-highway vehicle (OHV) use in GRSG habitat as follows (**Figure 2-13, Trails and Travel Management [Appendix A]**):

- Open to cross-country use: 525 acres (one area each in Parker Mountain and Uintah Population Areas)
- Limited to existing routes: 1,274,700 acres
- Limited to designated routes: 1,220,500 acres
- Closed: 33,200 acres

MA-TTM-2: PHMA and GHMA that do not have designated routes in a Travel Management Plan will be managed as limited to existing routes until a Travel Management Plan designates routes (unless they are already designated as limited to designated routes or closed to OHV use).

OHV Areas designated as “closed” will be managed as areas closed to motorized vehicles. OHV Areas designated as “limited existing” within PHMA will be managed as “limited to existing roads, primitive roads, and trails” until the completion of an implementation level travel plan. Individual route designations will occur during subsequent implementation level travel management planning efforts. Upon the completion of implementation level travel management plans OHV areas designated as “Limited” will automatically transition to “limited to designated roads, primitive roads and trails.”

MA-TTM-3: Implementation level travel planning efforts will be guided by the goals, objectives and guidelines outlined in the GRSG section, relevant national and Utah specific guidance as well as the following:

- A timeline to complete travel planning efforts will be identified, prioritized and updated annually in all relevant planning areas to accelerate the accomplishment of: data collection, route evaluation and selection, and on the ground implementation efforts including signing, monitoring and rehabilitation.
- During subsequent travel management planning, consultation “with interested user groups, federal, state, county, and local agencies, local landowners, and other parties in a manner that provides an opportunity for the public to express itself and have its views given consideration.” Consequently, a public outreach plan to fully engage all interested stakeholders will be incorporated into future travel management plans.

- Among other designation criteria from 43 CFR, Part 8342.1(b), “areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats.”
- During subsequent travel management planning, all routes will undergo a route evaluation to determine its purpose and need and the potential resource and/or user conflicts from motorized travel. Where resource and/or user conflicts outweigh the purpose and need for the route, the route will be considered for closure or considered for relocation outside of sensitive GRSG habitat.
- During subsequent travel planning, threats to GRSG and their habitat will be considered when evaluating route designations and/or closures.
- During subsequent travel management planning, routes that do not have a purpose or need will be considered for closure.
- During subsequent travel management, planning, routes that are duplicative, parallel, or redundant will be considered for closure.
- During subsequent travel management planning, seasonal restrictions on OHV use will be considered in important seasonal habitats where OHV use is a threat. During subsequent travel management planning, consider limiting over snow vehicles designed for use over snow and that runs on a track or tracks and/or a ski or skis, while in use over snow to designated routes or consider seasonal closures in GRSG wintering areas from November 1 through March 31.
- During subsequent travel management planning, routes not required for public access or recreation with a current administrative/agency purpose or need will be evaluated for administrative access only.
- During subsequent travel management planning, consider prioritizing restoration of routes not designated in a Travel Management Plan.
- During subsequent travel management plan implementation, consider using seed mixes or transplant techniques that will maintain or enhance GRSG habitat when rehabilitating linear disturbances.
- During subsequent travel management plan implementation, consider scheduling road maintenance to avoid disturbance during sensitive periods and times to the extent practicable. Consider using time of day limits (e.g., no use between 6:00 pm and 9:00 am) to reduce impacts on GRSG during breeding periods.

MA-TTM-4: In PHMA, complete transportation plans in accordance with National BLM Travel Management guidance, requiring the BLM to maintain a current action plan and planning schedule to most effectively target available resources. The following GRSG population areas are Utah’s top priority areas to designate comprehensive travel plans:

- Sheeprocks
- Bald Hills
- Box Elder
- Rich
- Ibapah
- Hamlin Valley

MA-TTM-5: In PHMA, travel systems will be managed with an emphasis on improving the sustainability of the travel network in a comprehensive manner to minimize impacts on GRSG, maintain motorist safety, and prevent unauthorized cross country travel while meeting access needs. To do so, it may be necessary to improve portions of existing routes, close existing routes or create new routes that meet user group needs, thereby reducing the potential for pioneering unauthorized routes. The emphasis of the comprehensive travel and transportation planning will be placed on having a neutral or positive effect on GRSG habitat.

MA-TTM-6: In PHMA, when considering upgrade of existing routes that will change route category (BLM route categories: road, primitive road, or trail) or capacity, consider the larger transportation network while providing for protection of GRSG habitat.

MA-TTM-7: In PHMA, use existing roads, or realignments as described above to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to the absolute minimum standard necessary, and add the surface disturbance to the total disturbance. Apply additional effective mitigation necessary to offset the resulting loss of GRSG habitat. Plan for new routes in consideration of the larger transportation network objectives and needs while providing for protection of GRSG habitat.

MA-TTM-8: In PHMA, when reseeding roads, primitive roads and trails, use appropriate seed mixes and consider the use of transplanted sagebrush.

MA-TTM-9: Develop an educational process to advise OHV users of the potential for conflict with GRSG.

MA-TTM-10: In PHMA and GHMA, temporary closures will be considered in accordance with 43 CFR subpart 8364 (Closures and Restrictions); 43 CFR, subpart 8351 (Designated National Area); 43 CFR, subpart 6302 (Use of Wilderness Areas, Prohibited Acts, and Penalties); 43 CFR, subpart 8341 (Conditions of Use) and any applicable policies.

Temporary closure or restriction orders under these authorities are enacted at the discretion of the authorized officer to resolve management conflicts and protect persons, property, and public lands and resources. Where an authorized officer determines that OHVs are causing or will cause considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources, the affected areas shall be immediately closed to the type(s) of vehicle causing the adverse effect until the adverse effects are eliminated and measures implemented to prevent recurrence. (43 CFR, Part 8341.2) A closure or restriction order should be considered only after other management strategies and alternatives have been explored. The duration of temporary closure or restriction orders should be limited to 24 months or less; however, certain situations may require longer closures and/or iterative temporary closures. This may include closure of routes or areas.

CHAPTER 3

CONSULTATION, COORDINATION, AND PUBLIC INVOLVEMENT

The BLM land use planning activities are conducted in accordance with NEPA requirements, Council on Environmental Quality regulations, and Department of the Interior and BLM policies and procedures implementing NEPA. NEPA and associated laws, regulations, and policies require the BLM to seek public involvement early in and throughout the planning process. Public involvement and agency consultation and coordination, which have been at the heart of the planning process leading to this ARMPA, were achieved through *Federal Register* notices, public and informal meetings, individual contacts, media releases, planning bulletins, and the Utah Subregion GRSG website (http://www.blm.gov/ut/st/en/prog/planning/SG_RMP_rev.html).

3.1 CONSULTATION AND COORDINATION

The BLM collaborated with numerous agencies, municipalities, and tribes throughout the preparation of this ARMPA. Its outreach and collaboration with cooperating agencies are described in Chapter 6 of the Proposed Resource Management Plan Amendment (RMPA)/Final EIS. Twenty-eight agencies signed memoranda of understanding to participate in the BLM planning process as cooperating agencies. The BLM invited the cooperating agencies to participate in developing the alternatives for the RMPA and EIS and to provide data and other information related to their agency responsibilities, goals, mandates, and expertise.

3.1.1 Section 7 Consultation

In accordance with Section 7 of the ESA, as amended, the BLM requested a species list from USFWS of any federally listed, federally proposed, or current federal candidate species that may be present in the planning area. It initiated formal consultation with the USFWS under Section 7 of the ESA on November 19, 2013, and requested concurrence on which species would be analyzed in the biological assessment. In May 2015, the biological assessment was formally submitted to the USFWS for review. In July 2015, following additional consultation efforts, the BLM formally submitted a revised biological assessment to the USFWS for review.

The determination for most species is “no effect.” Two species received a determination of “not likely to jeopardize the continued existence of the species” and 11 species received a determination of “may affect, but is not likely to adversely affect.” The Utah prairie dog received a determination of “may affect, likely to adversely affect.” This means that the Utah prairie dog or its habitat are likely to be exposed to the action or its environmental consequences and would respond in a negative manner to the exposure. Formal Section 7 consultation was completed on August 3, 2015, when the USFWS provided a biological opinion, concurring with the findings of the biological assessment (see **Appendix J**, Biological Opinion).

3.1.2 NHPA Section 106 Consultation

The BLM completed consultation with the Utah State Historic Preservation Officer, in accordance with 36 CFR, Part 800. In July 2015, it submitted a formal letter, concluding that the land use plan amendments would not adversely affect cultural properties and seeking input and concurrence on those findings. The BLM received a concurrence letter from the Utah State Historic Preservation Officer on July 30, 2015. The BLM will satisfy the requirements of National Historic Preservation Act (NHPA) Section 106 for future implementation-level decisions, such as project proposals. This will include adequate consultation with State Historic Preservation Officers, tribal historic preservation officers, Native American tribes, and other interested parties, consistent with the alternative procedures set forth in the NHPA and relevant state protocol, programmatic agreements, or where applicable the Section 106 regulations.

3.1.3 American Indian Tribal Consultation

In accordance with the NHPA and other legal authorities (see BLM Manual 8120), the BLM consulted with tribal representatives for the RMP planning process. Coordination with American Indian tribes occurred throughout the planning process. All tribes and organizations with interests in the planning area were contacted by mail and encouraged to be cooperating agencies. Tribes have been participating in the RMP process through meetings and other contacts. A request for a consultation meeting and copies of the RMP were sent to the following tribes and reservations in December 2011, October 2013, and May 2015:

- Confederated Tribes of the Goshute Indian Reservation
- Eastern Shoshone Tribe
- Hopi Tribal
- Kaibab Band of Paiute Indians
- Navajo Nation
- Navajo Utah Commission
- Northwest Band of Shoshone Nation
- Paiute Indian Tribe of Utah
- Shoshone-Bannock Tribes
- Skull Valley Band of Goshute Indians
- Southern Ute Indian Tribe
- Te-Moak Tribe of Western Shoshone Indians of Nevada

- Ute Indian Tribe-Uintah and Ouray Reservation
- Ute Mountain Ute Tribe
- White Mesa Ute Tribe

The Confederated Tribes of the Goshute Indian Reservation responded to the initial letter, accepting the invitation to be a cooperating agency. The BLM presented additional information related to the project at a Tribal Council Meeting on February 10, 2012. The Confederated Tribes of the Goshute Indian Reservation formalized their cooperating agency status through a Memorandum of Understanding on June 1, 2012. They have participated in a variety of meetings, briefings, and reviews throughout preparation of the EIS. The BLM met with the tribal council and discussed the Proposed RMPA/Final EIS in June 2015.

The Shoshone-Bannock Tribes responded to the letter and follow-up phone conversations, requesting additional information before making a decision on cooperating agency status. Through coordination with the BLM's Utah and Idaho State Offices and the Shoshone-Bannock Tribe, the tribe decided not to become a cooperating agency, but it did request ongoing consultation in relation to the GRSG planning in Idaho and the adjacent states. The determination was made that the BLM's Idaho Falls District would take the lead in face-to-face consultation efforts but that any additional information from other planning efforts would be provided as needed and requested. The BLM met with resource specialists from the Shoshone-Bannock Tribes and discussed the Proposed RMPA/Final EIS in June 2015.

The Paiute Indian Tribe of Utah also requested information on the project. The BLM consulted with the tribe on November 1, 2013, at a tribal council meeting. The agencies presented information related to the planning process in general and the Draft RMPA/EIS in particular. At the end of the briefing, the participants discussed several questions, and the BLM offered to consult further on GRSG planning. Additional consultation was conducted during development of the Proposed RMPA/Final EIS, when the BLM met with the tribal council in June 2015.

The Ute Indian Tribe-Uintah and Ouray Reservation submitted comments on the Draft RMPA/EIS to the BLM on January 14, 2014. The tribe raised several concerns about the range of alternatives, including restrictions in Alternatives B, C, and D. Additional attempts to contact or meet with the tribe were unsuccessful.

Other tribes declined or did not respond to the BLM's requests for consultation on the RMPA.

Regardless of consultation efforts, nothing in the ARMPA affects tribal treaty or off-reservation rights. Management of public lands recognizes and will be consistent with the treaty rights retained by the various tribes. Many of the treaty rights and subsequent laws, executive orders, regulations, and agency policies protect the sovereign nature of the reservations, as well as use of traditional homelands and use areas, including portions of the planning area.

3.2 PUBLIC INVOLVEMENT

The public involvement process, consultation, and coordination conducted for the RMP are described in Chapter 6 of the Proposed RMPA/Final EIS. As required by regulation, public scoping meetings were conducted following the publication of the notice of intent to prepare an EIS in the *Federal Register* on December 9, 2011.

A notice of availability for the Draft RMPA/EIS was published in the *Federal Register* on November 1, 2013, initiating a 90-day public comment period. The BLM held eight public comment open houses for the Draft RMPA/EIS from November 19 to December 12, 2013, in Richfield, Cedar City, Panguitch, Vernal, Price, Salt Lake City, Randolph, and Snowville. The comments received on the Draft RMPA/EIS and the BLM's responses were summarized in Appendix X of the Proposed RMPA/Final EIS.

The notice of availability for the Proposed RMPA/Final EIS was published on May 29, 2015, initiating a 30-day public protest period and a 60-day governor's consistency review period. The 30-day protest period ended on June 29, 2015, by which point the BLM had received 43 protest letters.

CHAPTER 4

PLAN IMPLEMENTATION

4.1 IMPLEMENTING THE PLAN

Implementation, after a BLM RMP or RMP amendment is approved, is a continuous and active process. Management decisions can be characterized as *immediate* or *one-time future* decisions.

Immediate decisions—These are the land use planning decisions that go into effect when the ROD is signed. They include goals, objectives, allowable uses, and management direction, such as the allocation of lands as open or closed for salable mineral sales, lands open with stipulations for oil and gas leasing, and areas designated for OHV use. These decisions require no additional analysis and guide future land management actions and subsequent site-specific implementation decisions in the planning area. Proposals for future actions, such as oil and gas leasing, land adjustments, and other allocation-based actions will be reviewed against these LUP decisions to determine if the proposal conforms with the LUP.

One-time future decisions—These types of decisions are those that are not implemented until additional decision-making and site-specific analysis is completed. Examples are implementation of the recommendations to withdraw lands from locatable mineral entry or development of travel management plans. Future one-time decisions require additional analysis and decision-making and are prioritized as part of the BLM budget process. Priorities for implementing one-time RMP decisions will be based on the following criteria:

- National BLM management direction
- Available resources

General implementation schedule of one-time decisions—Future decisions discussed in this ARMPA will be implemented over a period of years, depending on budget and staff availability. After issuing the ROD, the BLM will prepare implementation plans that establish tentative time frames for completing one-time decisions identified in the ARMPA. These actions require additional site-specific decision-making and analysis.

This schedule will assist BLM managers and staff in preparing budget requests and in scheduling work. However, the proposed schedule must be considered tentative and will be affected by future funding, nondiscretionary workloads, and by partner and external public cooperation. Yearly review of the plan will provide consistent tracking of accomplishments and information that can be used to develop annual budget requests to continue implementation.

4.2 MAINTAINING THE PLAN

The ARMPA can be maintained as necessary to reflect minor changes in data. Plan maintenance is limited to further refining or documenting a previously approved decision incorporated in the plan or clarifying previously approved decisions.

The BLM expects that new information gathered from field inventories and assessments, research, other agency studies, and other sources will update baseline data or support new management techniques, best management practices, and scientific principles. Where monitoring shows LUP actions or best management practices are not effective, plan maintenance or amendment may begin, as appropriate.

Plan maintenance will be documented in supporting records; it does not require formal public involvement, interagency coordination, or NEPA analysis for making new LUP decisions.

4.3 CHANGING THE PLAN

The ARMPA may be changed, should conditions warrant, through a plan amendment or plan revision. A plan amendment may become necessary if major changes are needed or to consider a proposal or action that is not in conformance with the plan. The results of monitoring, evaluation of new data, or policy changes and changing public needs might also provide a need for a plan amendment. If several areas of the plan become outdated or otherwise obsolete, a plan revision may become necessary. Plan amendments and revisions are accomplished with public input and the appropriate level of environmental analysis conducted according to the Council on Environmental Quality procedures for implementing NEPA.

As new information becomes available about GRSG habitat, including seasonal habitats, in coordination with the state wildlife agency and USFWS and based on best available scientific information, the BLM may revise the GRSG habitat management area maps and associated management decisions through plan maintenance or plan amendment/revision, as appropriate.

Minor adjustments to PHMA and GHMA external boundaries can be made. This would come about if BLM biologists determine, in coordination with the appropriate State of Utah agency and based on best scientific information, that site-specific conditions warrant such changes to more accurately depict existing or potential GRSG habitat. The appropriate planning process (i.e., plan maintenance or plan amendment/revision) will be used, as determined on a case-by-case basis, considering site-specific issues.

4.4 PLAN EVALUATION, MONITORING, AND ADAPTIVE MANAGEMENT

Evaluation is a process in which the plan and monitoring data are reviewed to see if management goals and objectives are being met and if management direction is sound. RMP evaluations determine if decisions are being implemented, if mitigation measures are satisfactory, if there are significant changes in the related plans of other entities, if there is new data of significance to the plan, and if decisions should be changed through amendment or revision. Monitoring data gathered over time is examined and

used to draw conclusions on whether management actions are meeting stated objectives, and if not, why not. Conclusions are then used to make recommendations on whether to continue current management or to identify what changes need to be made in management practices to meet objectives.

The BLM will use RMP evaluations to determine if the decisions in the RMP Amendment, supported by the accompanying NEPA analysis, are still valid in light of new information and monitoring data. Evaluations will follow the protocols established by the BLM Land Use Planning Handbook (H-1601-1) or other appropriate guidance in effect at the time the evaluation is initiated. The monitoring framework for this ARMPA can be found in **Appendix D**.

The ARMPA also includes an adaptive management strategy that includes soft and hard triggers and responses. These triggers are not specific to any particular project but identify habitat and population thresholds. Triggers are based on the two key metrics that are being monitored during the life of the ARMPA: habitat loss and population declines. Soft triggers represent an intermediate threshold indicating that management changes are needed at the implementation level to address habitat or population losses. If a soft trigger is tripped during the life of the plans, the BLM's response is to apply more conservative or restrictive conservation measures to mitigate for the specific cause in the decline of populations or habitats, with consideration of local knowledge and conditions. These adjustments would be made to preclude tripping a hard trigger, which would signal more severe habitat loss or population declines. Hard triggers represent a threshold indicating that immediate action is necessary to stop a severe deviation from GRSG conservation objectives set forth in the ARMPA.

In the event that new scientific information becomes available demonstrating that the hard trigger response would be insufficient to stop a severe deviation from GRSG conservation objectives set forth in the ARMPA, the BLM would implement interim management direction to ensure that conservation options are not foreclosed. The BLM would also undertake any appropriate plan amendments or revisions, if necessary. More information regarding the ARMPA's adaptive management strategy can be found in **Appendix I** and is outlined in the adaptive management direction in **Section 2.2** of this ARMPA.

This page intentionally left blank.

CHAPTER 5

GLOSSARY

Acquisition. Acquisition of lands can be pursued to facilitate various resource management objectives. Acquisitions, including easements, can be completed through exchange, Land and Water Conservation Fund purchases, donations, or receipts from the Federal Land Transaction Facilitation Act sales or exchanges.

Activity plan. A type of implementation plan (see *Implementation plan*); an activity plan usually describes multiple projects and applies best management practices to meet land use plan objectives. Examples of activity plans are interdisciplinary management plans, habitat management plans, recreation area management plans, and grazing plans.

Adaptive management. A type of natural resource management in which decisions are made as part of an ongoing science-based process. Adaptive management involves testing, monitoring, and evaluating applied strategies and incorporating new knowledge into management approaches that are based on scientific findings and the needs of society. Results are used to modify management policy, strategies, and practices.

Administrative access. Access for resource management and administrative purposes, such as fire suppression, cadastral surveys, permit compliance, law enforcement and military in the performance of their official duty, or other access needed to administer BLM lands or uses.

Allotment. An area of land in which one or more livestock operators graze their livestock. Allotments generally consist of BLM-administered or National Forest System lands but may include other federally managed, state-owned, and private lands. An allotment may include one or more separate pastures. Livestock numbers and periods of use are specified for each allotment.

Allotment management plan (AMP). A concisely written program of livestock grazing management, including supportive measures if required, designed to attain specific, multiple-use management goals in a grazing allotment. An AMP is prepared in consultation with the permittees, lessees, and other affected interests. Livestock grazing is considered in relation to other uses of the range and to renewable resources, such as watersheds, vegetation, and wildlife. An AMP establishes

seasons of use, the number of livestock to be permitted, the range improvements needed, and the grazing system.

Amendment. The process for considering or making changes in the terms, conditions, and decisions of approved resource management plans or management framework plans. Usually only one or two issues are considered that involve only a portion of the planning area.

Animal unit month. The amount of forage necessary for the sustenance of one cow or its equivalent for one month.

Anthropogenic (human) disturbances. Features include paved highways, graded gravel roads, transmission lines, substations, wind turbines, oil and gas wells, geothermal wells and associated facilities, pipelines, landfills, agricultural conversion, homes, and mines.

Authorized/authorized use. This is an activity (i.e., resource use) occurring on the public lands that is either explicitly or implicitly recognized and legalized by law or regulation. This term may refer to those activities occurring on the public lands for which the BLM or other appropriate authority (e.g., Congress for RS 2477 rights-of-way or FERC for major interstate rights-of-way) has issued a formal authorization document, such as a livestock grazing lease or permit, a right-of-way grant, a coal lease, or an oil and gas permit to drill. Formally authorized uses can involve commercial and noncommercial activity, facility placement, or event. These formally authorized uses are often limited by area or time. Unless constrained or bound by statute, regulation, or an approved land use plan decision, legal activities involving public enjoyment and use of the public lands for such activities as hiking, camping, and hunting require no formal BLM.

Avoidance/avoidance area. These terms usually address mitigation of some resource use. Paraphrasing the Council on Environmental Quality Regulations (40 CFR, Part 1508.20), avoidance means to circumvent or bypass an impact altogether by not taking a certain action or parts of an action. Therefore, avoidance does not necessarily prohibit a proposed activity, but it may require relocating or totally redesigning an action to eliminate any potential impacts resulting from it. Also see “right-of-way avoidance area” definition.

Baseline. The existing condition of a defined area or resource that can be quantified by an appropriate measure. During environmental reviews, the baseline is considered the affected environment at the time the review begins and is used to compare predictions of the effects of the proposed action or a reasonable range of alternatives.

Best management practices (BMPs). A suite of techniques that guide or may be applied to management actions to aid in achieving desired outcomes. BMPs are often developed in conjunction with land use plans, but they are not considered a planning decision unless the plans specify that they are mandatory.

Biologically significant unit (BSU). A geographical/spatial area within GRSG habitat that contains the relevant habitats that GRSG use. In Utah, BSUs are synonymous with PHMA within a geographic area identified as the population area. BSU is used as a common point of reference for coordinating across state lines on regional conservation monitoring and management. A BSU or subset is used only in calculating the human disturbance threshold and the adaptive management habitat trigger.

BLM Sensitive Species. Those species that are not federally listed as endangered, threatened, or proposed under the ESA but that are designated by the BLM State Director under 16 USC, Section 1536(a)(2), for special management consideration. By national policy, federally listed candidate species are automatically included as sensitive species, which are managed so they will not need to be listed as proposed, threatened, or endangered under the ESA.

Candidate species. Taxa for which the USFWS has sufficient information on their status and threats to propose the species for listing as endangered or threatened under the Endangered Species Act, but for which issuing a proposed rule is currently precluded by higher priority listing actions. Separate lists for plants, vertebrate animals, and invertebrate animals are published periodically in the *Federal Register* (BLM Manual 6840, Special Status Species Manual).

Chemical vegetation treatment. Application of herbicides to control invasive species, noxious weeds, and unwanted vegetation. To meet resource objectives the preponderance of chemical treatments would be used in areas where cheatgrass or noxious weeds have invaded sagebrush steppe.

Closed area. Where one or more uses are prohibited, either temporarily or over the long term. Areas may be closed to such uses such as off-road vehicles, mineral leasing, mineral or vegetation collection, or target shooting. In areas closed to off-road vehicle use, motorized and mechanized off-road vehicle use is prohibited. Use of motorized and mechanized off-road vehicles in closed areas may be allowed for certain reasons; however, such use would be made only with the approval of the BLM Authorized Officer (43 CFR, Part 8340.0-5).

Collocation (communication sites). The installation of new equipment or facilities on, in, or next to existing authorized equipment or facilities or within a communication site boundary, as designated in the communication site plan.

Collocation (electrical lines). Installation of new rights-of-way next to current ROW boundaries, not necessarily placed on the same power poles.

Collocation (designated corridors). The installation of new rights-of-way in or next to the existing corridor.

Collocation (other rights-of-way). The installation of new rights-of-way in the existing footprint of an approved ROW boundary or next to an approved ROW boundary.

Collaboration. A cooperative process in which interested parties, often with widely varied interests, work together to seek solutions with broad support for managing public and other lands. Collaboration may take place with any interested parties, whether or not they are a cooperating agency.

Communication site. Sites that include broadcast types of uses (e.g., television, AM/FM radio, cable television, and broadcast translator) and non-broadcast uses (e.g., commercial or private mobile radio service, cellular telephone, microwave, local exchange network, and passive reflector).

Compensatory mitigation. Compensating for the residual impact of a certain action or parts of an action by replacing or providing substitute resources or environments. (40 CFR, Part 1508.20)

Compensatory mitigation projects. The restoration, creation, enhancement, or preservation of impacted resources (adopted and modified from 33 CFR, Part 332), such as on-the-ground actions to improve or protect habitats (e.g., chemical vegetation treatments, land acquisitions, and conservation easements).

Condition class (fire regimes). Fire regime condition classes describe the degree of departure from historical fire regimes, possibly altering key ecosystem components, such as species composition, structural stage, stand age, canopy closure, and fuel loadings. One or more of the following activities may have caused this departure: fire suppression, timber harvesting, livestock grazing, introduction and establishment of exotic plant species, or introduced insects or disease.

Condition of approval. A condition of approval is a requirements under which a permit is approved after a lease is issued. Conditions of approval are based on site-specific analysis and are designed to minimize, mitigate, or prevent impacts on resource values or other uses of public lands.

Conformance. A proposed action would be specifically provided for in a land use plan or, if not specifically mentioned, would be clearly consistent with the goals, objectives, or standards of the approved land use plan.

Conservation measures. Measures to conserve, enhance, or restore Greater Sage-Grouse habitat by reducing, eliminating, or minimizing threats.

Conservation strategy. Outlines current activities or threats that are contributing to the decline of a species, along with the actions or strategies needed to reverse or eliminate such a decline or threats. Conservation strategies are generally developed for species of plants and animals that are designated as BLM sensitive species or that have been determined by the USFWS or National Oceanographic and Atmospheric Administration-Fisheries to be federal candidates under the Endangered Species Act.

Controlled surface use. This is a category of moderate constraint stipulations that allows some use and occupancy of public land, while protecting identified resources or values and is applicable to fluid mineral leasing and all activities associated with fluid mineral leasing. CSU areas are open to fluid mineral leasing, but the stipulation allows the BLM to require special operational constraints, or the activity can be shifted more than 656 feet to protect the specified resource or value.

Cooperating agency. Assists the lead federal agency in developing an environmental assessment or environmental impact statement. It can be any agency with jurisdiction by law or special expertise for proposals covered by NEPA (40 CFR, Part 1501.6). Any tribe or federal, state, or local government jurisdiction with such qualifications may become a cooperating agency by agreement with the lead agency.

Council on Environmental Quality. An advisory council to the President, established by the National Environmental Policy Act of 1969. It reviews federal programs to analyze and interpret environmental trends and information.

Cultural resources. Locations of human activity, occupation, or use. Cultural resources include archaeological, historic, or architectural sites, structures, or places with important public and scientific uses, and locations of traditional cultural or religious importance to specified social or cultural groups.

Decision area. Includes lands within the planning area for which the BLM has authority to make management decisions. The BLM has jurisdiction over all BLM-administered lands. In addition, it has jurisdiction over federal minerals in some areas where the surface is owned by a non-federal entity. The decision area for this project includes all GRSG-occupied habitat administered by the BLM, including non-federal lands where there are federal mineral interests.

Deferred/deferred use. To set aside or postpone a particular resource use or activity on the public lands to a later time. Generally when this term is used the period of the deferral is specified. Deferments sometimes follow the sequence time frame of associated serial actions (e.g., Action B will be deferred until Action A is completed).

Designated roads and trails. Specific roads and trails identified by the BLM (or other agency) where some type of motorized or nonmotorized use is appropriate and allowed, either seasonally or yearlong (H-1601-1, BLM Land Use Planning Handbook). The action of designating specific routes for specific uses is done during implementation-level planning. The action of designating areas where travel will be limited to designated routes is a land use plan-level decision.

Desired condition. A description of specific social, economic, or ecological characteristics of the plan area, or a portion of the plan area, where management of the land and resources should be directed. Desired conditions must be described in terms that are specific enough to allow progress toward their achievement to be determined but not include completion dates.

Desired future condition. For rangeland vegetation, the condition of rangeland resources on a landscape scale that meet management objectives. It is based on ecological, social, and economic considerations during the land planning process. It is usually expressed as ecological status or management status of vegetation (species composition, habitat diversity, and age and size class of species) and desired soil qualities (soil cover, erosion, and compaction). In a general context, desired future condition is a portrayal of the land or resource conditions that are expected to result if goals and objectives are fully achieved.

Directional drilling. A technique whereby a well is deliberately deviated from vertical in order to reach a particular part of the oil- or gas-bearing reservoir. Directional drilling technology enables the driller to steer the drill stem and bit to a desired bottom hole location. Directional wells initially are drilled straight down to a predetermined depth and then gradually curved at one or more different points to penetrate one or more given target reservoirs. This specialized drilling usually is accomplished with the use of a fluid-driven downhole motor, which turns the drill bit. Directional drilling also allows multiple production and injection wells to be drilled from a single surface location, such as a gravel pad, thus minimizing cost and the surface impact of oil and gas drilling, production, and transportation facilities. It can be used to reach a target located beneath an environmentally sensitive area (Alaska Department of Natural Resources, Division of Oil and Gas 2009).

Disposal lands. Transfer of public land out of federal ownership to another party through sale, exchange, Recreation and Public Purposes Act of 1926, Desert Land Entry, or other land law statutes.

Disruptive activities. Those public land resource uses and activities that are likely to alter the behavior, displace, or cause excessive stress to animal or human populations at a specific location or time. In this context, a disruptive activity refers to those actions that alter behavior or displace

individuals of a species such that reproductive success is negatively affected, or an their physiological ability to cope with environmental stress is compromised. This term does not apply to the physical disturbance of the land surface, vegetation, or features. When administered as a land use restriction (e.g., no disruptive activities), this term may prohibit or limit the physical presence of sound above ambient levels, light beyond background levels, or the nearness of people and their activities. The term is commonly used in conjunction with protecting wildlife during crucial life stages (e.g., breeding, nesting, and birthing), although it could apply to any resource value on the public lands. The use of this land use restriction is not intended to prohibit all activity or authorized uses.

Easement. A right afforded a person or agency to make limited use of another's real property for access or other purposes.

Ecological site. A distinctive kind of land with specific physical characteristics that differs from other kinds of land in its ability to produce a distinctive kind and amount of vegetation.

Emergency stabilization. Planned actions to stabilize and prevent unacceptable degradation to natural and cultural resources, to minimize threats to life or property resulting from the effects of a fire, or to repair, replace, or construct physical improvements necessary to prevent degradation of land or resources. Emergency stabilization actions must be taken within one year following containment of a wildfire.

Endangered species. Any species that is in danger of extinction throughout all or a significant portion of its range (BLM Manual 6840, Special Status Species Manual). Under the Endangered Species Act, "endangered" is the more protected of two categories (the other being "threatened"). Designation as endangered or threatened is determined by the USFWS as directed by the Endangered Species Act.

Endangered Species Act of 1973 (as amended; ESA). Designed to protect critically imperiled species from extinction because of economic growth and development untempered by adequate concern and conservation. The ESA is administered by two federal agencies, the USFWS and the National Oceanic and Atmospheric Administration. The purpose of the ESA is to protect species and the ecosystems they depend on (16 US Code, Sections 1531-1544).

Enhance. The improvement of habitat by increasing missing or modifying unsatisfactory components or attributes of the plant community to meet GRSG objectives.

Environmental assessment. A concise public document prepared to provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact. It includes a brief discussion of the need for the proposal, alternatives considered, environmental impact of the proposed action and alternatives, and a list of agencies and individuals consulted.

Environmental impact statement. A detailed statement prepared by the responsible official in which a major federal action that significantly affects the quality of the human environment is described, alternatives to the proposed action are provided, and effects are analyzed.

Evaluation (plan evaluation). The process of reviewing the land use plan and the periodic plan monitoring reports to determine whether the land use plan decisions and National Environmental Policy Act of 1969 analysis are still valid and whether the plan is being implemented.

Exchange. A transaction whereby the federal government receives land or interests in land in exchange for other land or interests in land.

Exclusion areas. An area on the public lands where a certain activity is prohibited to ensure the protection of other resource values. The term is frequently used in reference to lands and realty actions and proposals, such as rights-of-way, but is not unique to lands and realty program activities. This restriction is functionally analogous to no surface occupancy, which is used by the oil and gas program, and is applied as an absolute condition to those affected activities. The less restrictive analogous term is avoidance area. Also see *right-of-way exclusion area*.

Existing routes. The roads, trails, or ways that are used by operators of motorized vehicles (e.g., jeeps, all-terrain vehicles, and motorized dirt bikes), mechanized uses (e.g., mountain bikes, wheelbarrows, and game carts), pedestrians (hikers), and horseback riders and are, to the best of the BLM's knowledge, in existence at the time of RMP/EIS publication.

Exploration. Active drilling, geophysical operations, surface sampling and trenching, or small-scale mining or similar activities, to determine the presence of the mineral resource or the extent of the reservoir or mineral deposit.

Facility, Energy and Mining. Assets designed and created to serve a particular function and to afford a particular convenience or service that is affixed to a specific location, such as oil and gas well pads and associated infrastructure.

Federal Land Policy and Management Act of 1976 (FLPMA). Public Law 94-579, October 21, 1976, often referred to as the BLM's Organic Act, which provides most of the BLM's legislated authority, direction policy, and basic management guidance.

Federal mineral estate. Subsurface mineral estate owned by the United States and administered by the BLM. Federal mineral estate under BLM jurisdiction is composed of mineral estate underlying BLM-administered lands, tribal lands, privately owned lands, and state-owned lands.

Federal mineral interest. See *Federal mineral estate*.

Fire Regime Condition Classification System. Measures the extent to which vegetation departs from reference conditions, or how the current vegetation differs from a particular reference condition.

Fluid minerals. Oil, gas, coal bed natural gas, and geothermal resources.

Fuelbreak. A natural or man-made change in fuel characteristics that affects fire behavior so that fires burning into them can be more readily controlled.

General Habitat Management Area. BLM-administered lands where some special management will apply to sustain GRSG populations; areas of occupied seasonal or year-round habitat outside of PHMA.

Geographic information system. A system of computer hardware, software, data, people, and applications that capture, store, edit, analyze, and display a potentially wide array of geospatial information.

Geophysical exploration. An activity to locate or better define mineral or oil and gas deposits, using such geophysical methods as seismic refraction, electrical resistivity, induced magnetism, or other methods.

Geothermal energy. Natural heat from within the Earth captured to produce electricity, space heating, or industrial steam.

Goal. A broad statement of a desired outcome; usually not quantifiable and may not have established time frames for achievement.

Grazing preference. Grazing preference means a superior or priority position against others for receiving a grazing permit or lease. This priority is attached to base property owned or controlled by the permittee or lessee (43 CFR, Part 4100.0-5).

Grazing Relinquishment: the voluntary and permanent surrender by an existing permittee or lessee, with concurrence of any base property lienholder, of their priority (preference) to use a livestock forage allocation on public land as well as their permission to use this forage. Relinquishments do not require the consent or approval by BLM. The BLM's receipt of a relinquishment is not a decision to close areas to livestock grazing.

Grazing system. Scheduled grazing use and non-use of an allotment to reach identified goals or objectives by improving the quality and quantity of vegetation. It includes pasture development, utilization levels, grazing rotations, timing and duration of use periods, and necessary range improvements.

Guidelines. Actions or management practices that may be used to achieve desired outcomes, sometimes expressed as BMPs. Guidelines may be identified during the land use planning process, but they are not considered a land use plan decision unless the plan specifies that they are mandatory. For the BLM, guidelines for grazing administration must conform to 43 CFR, Part 4180.2.

Habitat. An environment that meets a specific set of physical, biological, temporal, or spatial characteristics that satisfy the requirements of a plant or animal species or group of species for part or all of their life cycle.

Impact. The effect, influence, alteration, or imprint caused by an action.

Implementation decisions. Decisions that take action to implement land use planning; generally appealable to Interior Board of Land Appeals under 43 CFR, Part 4.410.

Implementation plan. An area or site-specific plan written to implement decisions made in a land use plan. Implementation plans include both activity plans and project plans.

Indicators. Factors that describe resource condition and change and can help determine trends over time.

Indirect impacts. Result from implementing an action or alternative but usually occur later in time or are removed in distance and are reasonably certain to occur.

Land health condition. A classification for land health that includes these categories: meeting land health standard(s) and not meeting land health standard(s).

Meeting land health standard(s)—Lands for which health indicators are currently in acceptable condition such that basic levels of ecological processes and functions are in place. This rating includes the following subcategories:

- Fully meeting standard(s)—Lands for which there are no substantive concerns with health indicators
- Exceeding standard(s)—Lands for which health indicators are in substantially better conditions than acceptable levels
- Meeting standard(s) with problems—Lands that have one or more concerns with health indicators to the degree that they are categorized as meeting the land health standards but have some issues that make them at risk of becoming “not meeting”

Not meeting land health standard(s)—Lands for which one or more health indicators are in unacceptable conditions such that basic levels of ecological processes and functions are no longer in place.

Land health trend is used to describe these classes further. It includes these categories: upward, static, and downward.

- Upward trend—Lands that have shown improving indicator conditions over time
- Static trend—Lands that have shown no clear improvement or decline in indicator conditions over time
- Downward trend—Lands that have shown declining indicator conditions over time

Land tenure adjustments. Landownership or jurisdictional changes. To improve the manageability of BLM-administered lands and their usefulness to the public, the BLM has numerous authorities for repositioning lands into a more consolidated pattern, disposing of lands, and entering into cooperative management agreements. These land pattern improvements are completed primarily through the use of land exchanges but also through land sales, through jurisdictional transfers to other agencies, and through the use of cooperative management agreements and leases.

Land treatment. All methods of artificial range improvement and soil stabilization, such as reseeding, brush control (chemical and mechanical), pitting, furrowing, and water spreading.

Land use allocation. The identification in a land use plan of the activities and foreseeable development that are allowed, restricted, or excluded for all or part of the planning area, based on desired future conditions (H-1601-1, BLM Land Use Planning Handbook).

Land use plan. A set of decisions that establish management direction for land within an administrative area.

Land use plan decision. Establishes desired outcomes and actions needed to achieve them. Decisions are reached using the planning process in 43 CFR, Part 1600. When they are presented to the public as proposed decisions, they can be protested to the BLM Director. They are not appealable to Interior Board of Land Appeals.

Late brood-rearing area. Habitat includes mesic sagebrush and mixed shrub communities, wet meadows, and riparian habitats, as well as some agricultural lands (e.g., alfalfa fields).

Leasable minerals. Those minerals or materials designated as leasable under the Mineral Leasing Act of 1920. These include energy-related mineral resources such as oil, natural gas, coal, and geothermal, and some nonenergy minerals, such as phosphate, sodium, potassium, and sulfur. Geothermal resources are also leasable under the Geothermal Steam Act of 1970.

Lease. Section 302 of the Federal Land Policy and Management Act of 1976 provides the BLM with the authority to issue leases for the use, occupancy, and development of public lands. Leases are issued for such purposes as commercial filming, advertising displays, commercial or noncommercial croplands, apiaries, livestock holding or feeding areas not related to grazing permits and leases, native or introduced species harvesting, temporary or permanent facilities for commercial purposes (does not include mining claims), residential occupancy, ski resorts, construction equipment storage sites, assembly yards, oil rig stacking sites, mining claim occupancy (if the residential structures are not incidental to the mining operation), and water pipelines and well pumps related to irrigation and non-irrigation facilities. The regulations establishing procedures for processing these leases and permits are found in 43 CFR, Part 2920.

Lease stipulation. A modification of the terms and conditions on a standard mineral lease form established at the time of the lease sale.

Lessee. A person or entity authorized to use and occupy National Forest System land under a specific instrument identified as a lease. Forest special use leases are limited to authorize certain wireless communication uses. Leases are also used for certain mineral leasable activities.

Lek. A traditional courtship display area attended by male GRSG in or adjacent to sagebrush dominated habitat. A lek is designated based on observations of two or more male GRSG engaged in courtship displays. Subdominant males may display on itinerant strutting areas during population peaks. Such areas usually fail to become established leks. Therefore, a site where fewer than five males are observed strutting should be confirmed active for two years before meeting the definition of a lek (Connelly et al. 2000, 2003, 2004).

Each state may have a slightly different definition of lek, active lek, inactive lek, occupied lek, and unoccupied leks. Regional planning will use the appropriate definition provided by the state of interest. Leks may be different shapes, may move, and may change size year to year. When specific information is available for lek edges, that information would be used for determining management buffers; when no specific information is available for lek edges and only lek point data are available, that information would be used for determining management buffers.

Active lek. Any lek that has been attended by male GRSG during the strutting season.

Inactive lek. Any lek where sufficient data suggests that there was no strutting activity throughout a strutting season. (Absence of strutting GRSG during a single visit is insufficient documentation to establish that a lek is inactive.) This designation requires documentation of an absence of GRSG on the lek during at least two ground surveys separated by at least seven days. These surveys must be conducted under ideal conditions (April 1 to May 7, or other appropriate date based on local conditions), no precipitation, light or no wind, half-hour before sunrise to one hour after sunrise). Alternatively, a ground check of the exact known lek site late in the strutting season (after April 15) that fails to find any sign (tracks, droppings, or feathers) of strutting activity. Data collected by aerial surveys should not be used to designate inactive status as the aerial survey may actually disrupt activities.

Occupied lek. A lek that has been active during at least one strutting season within the last 10 years.

Unoccupied lek. A lek that has either been destroyed or abandoned.

Destroyed lek. A formerly active lek site and surrounding sagebrush habitat that has been destroyed and is no longer suitable for GRSG breeding.

Abandoned lek. A lek in otherwise suitable habitat that has not been active for 10 consecutive years. To be designated abandoned, a lek must be inactive (see above criteria) in at least four nonconsecutive strutting seasons spanning 10 years. The site of an abandoned lek should be surveyed at least once every 10 years to determine whether it has been reoccupied by GRSG.

Limited area. Motorized vehicle travel within specified areas or on designated routes, roads, vehicle ways, or trails is subject to restrictions. The limited designation is used where OHV use must be restricted to meet specific resource management objectives. Examples of limitations include the number or type of vehicles, time or season of use, permitted or licensed use only, use limited to designated roads and trails, or other limitations if restrictions are necessary to meet resource management objectives, including certain competitive or intensive use areas that have special limitations (see 43 CFR, Part 8340.0-5; BLM Manual 1626, Travel and Transportation Manual).

Locatable minerals. Minerals subject to exploration, development, and disposal by staking mining claims as authorized by the Mining Law of 1872, as amended. This includes deposits of gold, silver, and other uncommon minerals not subject to lease or sale.

Master development plan. A set of information common to multiple planned wells, including drilling plans, surface use plans of operations, and plans for future production.

Mineral. Any naturally formed inorganic material, solid, or fluid inorganic substance that can be extracted from the Earth; any of various naturally occurring homogeneous substances (as stone, coal, salt, sulfur, sand, petroleum, water, or natural gas) obtained usually from the ground. Under federal laws, considered as locatable (subject to the general mining laws), leasable (subject to the Mineral Leasing Act of 1920), and salable (subject to the Materials Act of 1947).

Mineral entry. The filing of a claim on public land to obtain the right to any locatable minerals it may contain.

Mineral estate. The ownership of minerals, including rights necessary for access, exploration, development, mining, ore dressing, and transportation operations.

Mineral materials. Common varieties of mineral materials, such as soil, sand and gravel, stone, pumice, pumicite, and clay, that are not obtainable under the mining or leasing laws but that can be acquired under the Materials Act of 1947, as amended.

Minimization. Minimizing impacts by limiting the degree or magnitude of the action and its implementation (40 CFR, Part 1508.20 [b]).

Mining claim. A parcel of land that a miner takes and holds for mining purposes, having acquired the right of possession by complying with the Mining Law of 1872 and local laws and rules. A mining claim may contain as many adjoining locations as the locator may make or buy. There are four categories of mining claims: lode, placer, mill site, and tunnel site.

Mining Law of 1872, as amended. Provides for claiming and gaining title to locatable minerals on public lands. Also referred to as the Mining Law.

Mitigation. Includes specific means, measures, or practices that could be used to reduce, avoid, or eliminate adverse impacts. Mitigation can include avoiding the impact altogether by not taking a certain action or parts of an action, minimizing the impact by limiting the degree of magnitude of the action and its implementation, rectifying the impact by repairing, rehabilitation, restoring the affected environment, reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action, and compensating for the impact by replacing or providing substitute resources or environments.

Modification. A change to the provisions of a lease stipulation, either temporarily or for the term of the lease. Depending on the specific modification, the stipulation may or may not apply to all sites within the leasehold to which the restrictive criteria are applied.

Monitoring (plan monitoring). The process of tracking the implementation of land use plan decisions and collecting and assessing data necessary to evaluate their effectiveness.

Motorized vehicles or uses. Vehicles that are motorized, including jeeps, all-terrain vehicles (such as four-wheelers and three-wheelers), trail motorcycles or dirt bikes, and aircraft.

Multiple-use. The management of public lands and their various resource values so that they are used in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination

of uses that will give the greatest economic return or the greatest unit output (FLPMA; BLM Manual 6840, Special Status Species Manual).

National Environmental Policy Act of 1969 (NEPA). Public Law 91-190. Establishes environmental policy for the nation. NEPA requires federal agencies to consider environmental values in decision-making.

Net conservation gain. The actual benefit or gain above baseline conditions. Actions that result in habitat loss and degradation include those identified as threats that contribute to GRSG disturbance as identified by the USFWS in its 2010 listing decision (75 FR 13910) and shown in Table D.2 in the Greater Sage-Grouse Monitoring Framework (**Appendix D**). Exceptions to net conservation gain for GRSG may be made for vegetation treatments to benefit the Utah prairie dog.

Nonenergy leasable minerals. Those minerals or materials designated as leasable under the Mineral Leasing Act of 1920. Nonenergy minerals include resources such as phosphate, sodium, potassium, and sulfur.

Nonhabitat. Lands within management areas that do not contribute to the annual life-cycle of GRSG.

No surface occupancy (NSO). A major constraint where use or occupancy of the land surface for fluid mineral exploration or development and all activities associated with fluid mineral leasing (e.g., truck-mounted drilling and geophysical exploration equipment off designated routes, construction of wells or pads) are prohibited to protect identified resource values. Areas identified as NSO are open to fluid mineral leasing, but surface occupancy or surface-disturbing activities associated with fluid mineral leasing cannot be conducted on the surface of the land. Access to fluid mineral deposits would require horizontal drilling from outside the boundaries of the NSO area.

Noxious weeds. A plant species designated by federal or state law as generally possessing one or more of the following characteristics: aggressive and difficult to manage, parasitic, a carrier or host of serious insects or disease, or nonnative, new, or not common to the United States.

Objective. A description of a desired outcome for a resource. Objectives can be quantified and measured and, where possible, have established time frames for achievement.

Off-highway vehicle (OHV). Any motorized vehicle capable of or designated for travel on or immediately over land, water or other natural terrain. The definition excludes any non-amphibious registered motorboat, any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes, any vehicle whose use is expressly authorized by the authorized officer or otherwise officially approved, vehicles in official use, and any combat or combat support vehicle when used for national defense emergencies (43 CFR, Part 8340.0-5).

Open. Generally denotes that an area is available for a particular use or uses. Refers to specific program definitions found in law, regulations, or policy guidance for application to individual programs. For example, 43 CFR, Part 8340.0-5, defines the specific meaning of open as it relates to OHV use.

Opportunity areas or habitat. Those portions of a GRSG management area that currently do not contribute to its life cycle but are where restoration or rehabilitation can provide additional habitat

when linked to existing GRSG populations. This definition is applicable to Alternative E1 (based on the State of Utah's *Conservation Plan for Greater Sage-grouse in Utah*) and the Proposed Plans.

Permitted use. The forage allocated by, or under the guidance of, an applicable land use plan for livestock grazing in an allotment under a permit or lease and expressed in AUMs (43 CFR, Part 4100.0-5; from H-4180-1, BLM Rangeland Health Standards Manual).

Permittee. A person or company permitted to graze livestock on public land.

Plan of operations. Required for all mining exploration on greater than five acres or surface disturbance greater than casual use on certain special category lands. Special category lands are described under 43 CFR, Part 3809.11(c), and include such lands as designated areas of critical environmental concern, lands within the National Wilderness Preservation System, and areas closed to off-road vehicles. In addition, a plan of operations is required for activity greater than casual use on lands patented under the Stock Raising Homestead Act with federal minerals where the operator does not have the written consent of the surface owner (43 CFR, Part 3814). The plan of operations needs to be filed in the BLM field office with jurisdiction over the land involved. It does not need to be on a particular form but must address the information required by 43 CFR, Part 3809.401(b).

Planning area. The geographical area for which land use plans are developed and maintained. The Utah Subregion planning area includes all lands in Utah, minus Washington, San Juan, Davis, and Salt Lake Counties. These counties were not included in the planning area because they do not include GRSG habitat. In addition to lands in Utah, the Utah Subregion planning area also includes portions of the Ashley National Forest that extend into Wyoming.

Planning criteria. The standards, rules, and other factors developed by managers and interdisciplinary teams for their use in forming judgments about decision-making, analysis, and data collection during planning. Planning criteria streamlines and simplifies the resource management planning actions.

Policy. This is a statement of guiding principles or procedures designed and intended to influence planning decisions, operating actions, or other affairs of the BLM. Policies are established interpretations of legislation, executive orders, regulations, or other presidential, secretarial, or management directives.

Population area. Within the planning area, there are numerous areas with GRSG habitat. These areas are noncontiguous, meaning they are often separated by natural geographic features or barriers or human development. Because of the disconnected nature of the habitat, for the purpose of this planning process, the BLM placed all occupied GRSG habitat into one of 15 GRSG population areas (13 in Utah, 2 in Wyoming). The population area boundaries were drawn to include all occupied GRSG habitat in Utah plus areas within five miles of all occupied leks. The boundaries are also large enough to include areas that are not considered GRSG habitat but have been identified as lands that could provide important connectivity or facilitate the movement of GRSG between habitats. Although the boundaries of population areas were drawn using some biological considerations it is important to note that they are not intended to reflect distinct populations.

Prescribed fire. Any fire ignited by management actions to meet specific objectives. A written, approved prescribed fire plan must exist and NEPA requirements, where applicable, must be met before ignition.

Primitive road. A linear route managed for use by four-wheel drive or high-clearance vehicles. These routes do not customarily meet any BLM road design standards. Unless specifically prohibited, primitive roads can also include other uses, such as hiking, biking, and horseback riding (BLM Manual 1626, Travel and Transportation Manual).

Priority habitat management area (PHMA). BLM-administered lands identified as having the highest value to maintaining sustainable GRSG populations. Areas of PHMA largely coincide with areas identified as priority areas for conservation in the USFWS's COT Report. These areas include breeding, late brood-rearing, and winter concentration areas and migration or connectivity corridors.

Proper functioning condition. A term describing stream health that is based on the presence of adequate vegetation, landform, and debris to dissipate energy, reduce erosion, and improve water quality.

Public land. Land or interest in land owned by the United States and administered by the Secretary of the Interior through the BLM without regard to how the United States acquired ownership, except lands on the Outer Continental Shelf and land held for the benefit of Indians, Aleuts, and Eskimos (H-1601-I, BLM Land Use Planning Handbook).

Range Improvement. Any activity, structure, or program on or relating to rangelands that is designed to improve production of forage, to change vegetative composition, to control patterns of use, to provide water, to stabilize soil and water conditions, and to provide habitat for livestock and wildlife. The term includes structures, treatment projects, and use of mechanical means to accomplish the desired results.

Raptor. Bird of prey with sharp talons and strongly curved beaks, such as hawks, owls, falcons, and eagles.

Reclamation. The suite of actions taken in an area affected by human disturbance, the outcome of which is intended to change the condition of the disturbed area to meet predetermined objectives or to make it acceptable for certain defined resources (e.g., wildlife habitat, grazing, and ecosystem function).

Reference state. The state where the functional capacities represented by soil and site stability, hydrologic function, and biotic integrity are performing at an optimum level under the natural disturbance regime. This state usually includes what is often referred to as the potential natural plant community.

Renewable energy. Energy resources that constantly renew themselves or that are regarded as practically inexhaustible, such as solar, wind, geothermal, hydro, and biomass. Although particular geothermal formations can be depleted, the natural heat in the Earth is a virtually inexhaustible reserve of potential energy.

Required design features (RDFs). RDFs are required for certain activities in all GRSG habitat. They establish the minimum specifications for certain activities to help mitigate adverse impacts. However, the applicability and overall effectiveness of each RDF cannot be fully assessed until the project level when the project location and design are known. Because of site-specific circumstances, some RDFs may not apply to some projects (e.g., a resource is not present on a given site) or may require slight variations

(e.g., a larger or smaller protective area). All variations in RDFs would require that at least one of the following be demonstrated in the NEPA analysis associated with the project or activity:

- A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g., due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable.
- An alternative RDF, state-implemented conservation measure, or plan-level protection is determined to provide equal or better protection for GRSG or its habitat.
- A specific RDF will provide no additional protection to GRSG or its habitat.

Reserve common allotment. An area designated in the land use plan as available for livestock grazing; however, it is reserved as available for use as an alternative to grazing in another allotment in order to facilitate rangeland restoration treatments and recovery from natural disturbances, such as drought or wildfire. The reserve common allotment would provide needed flexibility that would help the agency apply temporary rest from grazing where vegetation treatments or management would be most effective.

Resource management plan. A BLM land use plan, as prescribed by the Federal Land Policy and Management Act that, for a given area of land, establishes land use allocations, coordination guidelines for multiple-use, objectives, and actions to be achieved.

Restore/restoration. Implementation of a set of actions that promotes plant community diversity and structure that allows plant communities to be more resilient to disturbance and invasive species over the long term. The long-term goal is to create functional high quality habitat that is occupied by GRSG. The short-term goal may be to restore the landform, soils, and hydrology and to increase the percentage of preferred vegetation, seeding of desired species, or treatment of undesired species.

Restriction/restricted use. A limitation or constraint on public land uses and operations. Restrictions can be of any kind but most commonly apply to certain types of vehicle use, temporal or spatial constraints, or certain authorizations.

Right-of-way (ROW). Public lands authorized to be used or occupied, for specific purposes according to a right-of-way grant, that are in the public interest and that require ROWs over, on, under, or through them.

Right-of-way avoidance area. An area identified through resource management planning to be avoided but may be available for ROW location with special stipulations.

Right-of-way exclusion area. An area identified through resource management planning that is not available for ROW location under any conditions.

Riparian area. A form of wetland transition between permanently saturated wetlands and upland areas. Riparian areas exhibit vegetation or physical characteristics that reflect the influence of permanent surface or subsurface water. Typical riparian areas are lands along perennially and intermittently flowing

rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels. Excluded are ephemeral streams or washes that lack vegetation and depend on free water in the soil.

Road. A linear route declared a road by the owner, managed for use by low-clearance vehicles having four or more wheels, and maintained for regular and continuous use.

Rotation. Grazing rotation between pastures in the allotment for the permitted time.

Routes. Multiple roads, trails and primitive roads; a group or set of roads, trails, and primitive roads that represents less than 100 percent of the transportation system. Generically, components of the transportation system are described as routes.

Sagebrush focal areas (SFA). Areas identified by the USFWS that represent recognized strongholds for GRSG that have been noted and referenced by the conservation community as having the highest densities of GRSG and other criteria important for the persistence of GRSG.

Season of use. The time during which livestock grazing is permitted on a given range area, as specified in the grazing lease.

Seeding. Seeding is a vegetation treatment that includes the application of grass, forb, or shrub seed, either aerially or from the ground. In areas of gentle terrain, seed is often applied with a rangeland drill. Seeding allows the establishment of native species or placeholder species and the restoration of disturbed areas to a perennial-dominated cover type, thereby decreasing the risk of subsequent invasion by exotic plant species. Seeding would be used primarily as a follow-up treatment in areas where disturbance or the previously described treatments have removed exotic plant species and their residue.

Special recreation permit (SRP). Authorization that allows for recreational uses of public lands and related waters. Issued as a means to control visitor use, to protect recreational and natural resources, and to provide for the health and safety of visitors. Commercial SRPs are also issued as a mechanism to provide a fair return for the commercial use of public lands.

Special status species. Species listed, candidate for listing, or proposed for listing under the Endangered Species Act and species requiring special management consideration to promote their conservation and reduce the likelihood and need for future listing under the Endangered Species Act and that are designated as BLM sensitive by the BLM State Director. All federally listed candidate species, proposed species, and delisted species in the five years following delisting are conserved as BLM sensitive species.

Split-estate. This is the circumstance where the surface of a particular parcel of land is owned by a different party than the minerals underlying the surface. Split-estates may have any combination of surface/subsurface owners: federal/state, federal/private, state/private, or percentage ownerships. When referring to the split-estate ownership on a particular parcel of land, it is generally necessary to describe the surface/subsurface ownership pattern of the parcel.

Stabilize. The process of stopping further damage from occurring.

Standard. A description of the physical and biological conditions or degree of function required for healthy sustainable lands (e.g., land health standards). To be expressed as a desired outcome (goal).

Stipulation (oil and gas). A provision that modifies standard oil and gas lease terms and conditions in order to protect other resource values or land uses and is attached to and made a part of individual lease requirements at the time the lease is issued. Once a mineral lease is issued, the applied stipulations cannot generally be changed or altered. Exceptions, modifications, or waivers may be granted under certain conditions outlined in the land use plan. Typical lease stipulations include no surface occupancy (NSO), timing limitations (TL), and controlled surface use (CSU). Lease stipulations are developed through the land use planning (RMP) process.

Surface disturbance. Suitable habitat is considered disturbed when it is removed and unavailable for immediate sage-grouse use.

- Long-term removal occurs when habitat is removed through activities that replace suitable habitat with long-term occupancy of unsuitable habitat, such as a roads, power lines, well pads, or active mines. Long-term removal may also result from any activities that cause soil mixing, soil removal, and soil exposure to erosion.
- Short-term removal occurs when vegetation is removed in small areas but is restored to suitable habitat within fewer than five years of disturbance, such as a successfully reclaimed pipeline, or successfully reclaimed drill hole or pit.
- Suitable habitat rendered unusable due to numerous human disturbances.
- Human surface disturbance are surface disturbances meeting the above definitions that result from human activities.

Surface-disturbing activities. An action that alters the vegetation, surface/near surface soil resources, or surface geologic features, beyond natural site conditions and on a scale that affects other public land values. Examples of surface-disturbing activities may include operation of heavy equipment to construct well pads, roads, pits and reservoirs; installation of pipelines and power lines; and the conduct of several types of vegetation treatments (e.g., prescribed fire). Surface-disturbing activities may be either authorized or prohibited.

Surface use. This is all the various activities that may be present on the surface or near-surface, such as pipelines, of public lands. It does not refer to those subterranean activities, such as mining, occurring on the public lands or federal mineral estate. When administered as a use restriction (e.g., no surface use), this phrase prohibits all but specified resource uses and activities in a certain area to protect particular sensitive resource values and property. This designation typically applies to small acreage sensitive resource sites (e.g., plant community study enclosure) or administrative sites (e.g., government ware-yard) where only authorized agency personnel are admitted.

Sustained yield. The achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple uses.

Tall structure. As used in this document, any man-made structure that could disrupt lekking or nesting birds by creating new perching or nesting opportunities or decrease the use of an area. A determination

as to whether something is considered a tall structure would be made based on local conditions, such as vegetation or topography.

Technically/economically feasible. Actions that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant. It is the BLM's sole responsibility to determine what actions are technically and economically feasible. The BLM will consider whether implementation of the proposed action is likely, given past and current practice and technology. This consideration does not necessarily require a cost-benefit analysis or speculation about an applicant's costs and profit. (Modified from the Council on Environmental Quality's 40 Most Asked Questions and BLM NEPA Handbook, Section 6.6.3.)

Temporary/temporary use. A relative term that must be considered in the context of the resource values affected and the nature of the resource use or activity taking place. Generally, a temporary activity is considered to be one that is not fixed in place and is of short duration.

Threatened species. Any species that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range (BLM Manual 6840, Special Status Species Management). Under the Endangered Species Act, threatened is the lesser-protected of two categories (the other being "endangered"). Designation as threatened (or endangered) is determined by USFWS as directed by the Endangered Species Act.

Timing limitation (TL). The TL stipulation, a moderate constraint, is applicable to fluid mineral leasing, all activities associated with fluid mineral leasing (e.g., truck-mounted drilling and geophysical exploration equipment off designated routes, and construction of wells and pads), and other surface-disturbing activities (those not related to fluid mineral leasing). Areas identified for TL are closed to fluid mineral exploration and development, surface-disturbing activities, and intensive human activity during identified time frames. This stipulation does not apply to operation and basic maintenance activities, including associated vehicle travel, unless otherwise specified. Construction, drilling, completions, and other operations considered to be intensive are not allowed. Intensive maintenance, such as work overs on wells, is not permitted. TLs can overlap spatially with NSO and CSU, as well as with areas that have no other restrictions.

Trail. A linear route managed for human-power (e.g., hiking or bicycling), stock (e.g., equestrian), or off-highway vehicle forms of transportation or for historical or heritage values. Trails are not generally managed for use by four-wheel drive or high-clearance vehicles.

Transfer of grazing preference. the BLM's approval of an application to transfer grazing preference from one party to another or from one base property to another, or both. Grazing preference means a superior or priority position against others for the purposes of receiving a grazing permit or lease. This priority is attached to base property owned or controlled by the permittee or lessee.

Transition. A shift between two states. Transitions are not reversible by simply altering the intensity or direction of factors that produced the change. Instead, they require new inputs, such as revegetation or shrub removal. Practices such as these that accelerate succession are often expensive to apply.

Transmission. The movement or transfer of electric energy over an interconnected group of lines and associated equipment between points of supply and points at which it is transformed for delivery to

consumers or is delivered to other electric systems. Transmission is considered to end when the energy is transformed for distribution to the consumer.

Transmission line. An electrical utility line with a capacity greater than or equal to 100 kilovolts or a natural gas, hydrogen or a water pipeline greater than or equal to 24 inches in diameter.

Tribal interests. Native American or Native Alaskan economic rights such as Indian trust assets, resource uses and access guaranteed by treaty rights, and subsistence uses.

Understory. That portion of a plant community growing underneath the taller plants on the site.

Unitization. A grouping of multiple adjacent mineral leases, in order to operate those leases as a single unit, under a single operator.

Utility corridor. Tract of land varying in width forming passageway through which various commodities such as oil, gas, and electricity are transported.

Valid existing rights. Documented legal rights or interests in the land that allow a person or entity to use said land for a specific purpose and that are still in effect. Such rights include fee title ownership, mineral rights, rights-of-way, easements, permits, and licenses. Such rights may have been reserved, acquired, leased, granted, permitted, or otherwise authorized over time.

Vegetation treatments. Management practices that change the vegetation structure to a different stage of development. Vegetation treatment methods include managed fire, prescribed fire, chemical, mechanical, and seeding.

Vegetation type. A plant community with immediately distinguishable characteristics based on and named after the apparent dominant plant species.

Watershed. Topographical region or area delineated by water draining to a particular watercourse or body of water.

West Nile virus. A virus that is found in temperate and tropical regions of the world and most commonly transmitted by mosquitoes. West Nile virus can cause flu-like symptoms in humans and can be lethal to birds, including GRSG.

Western Association of Fish and Wildlife Agencies (WAFWA) Management Zones (MZs). Seven GRSG management zones established based on populations across the entire range of the GRSG. GRSG habitat in the Utah Subregion overlaps four WAFWA MZs: MZ II (Wyoming Basins), MZ III (Southern Great Basin), MZ IV (Snake River Plain), and MZ VII (Colorado Plateau). WAFWA MZs are used in the cumulative effects analysis. WAFWA MZs will be used to identify and address cross-state issues, such as regional mitigation and adaptive management monitoring response, through WAFWA Management Zone GRSG Conservation Teams (Teams). These Teams will convene and respond to issues at the appropriate scale, and will utilize existing coordination and management structures to the extent possible.

Wilderness study area (WSA). An area inventoried, found to have wilderness characteristics, and managed to preserve those characteristics under authority of public lands required by Section 603 of FLPMA or the land use planning direction found in Section 202 of FLPMA.

Wildfire. Unplanned ignition or prescribed fire that is declared a wildfire. Wildfires may be managed to meet one or more objectives as specified in the RMP and these objectives can change as the fire spreads across the landscape.

Withdrawal. An action that restricts the use of public land and segregates the land from the operation of some or all of the public land and mineral laws. Withdrawals are also used to transfer jurisdiction of management of public lands to other federal agencies.

Winter concentration areas. GRSG winter habitats that are occupied annually by GRSG and provide sufficient sagebrush cover and food to support birds throughout the entire winter (especially periods with above average snow cover). Many of these areas support several different breeding populations of GRSG, who typically show high fidelity for these areas, and loss or fragmentation can result in significant population impacts.

This page intentionally left blank.

CHAPTER 6

REFERENCES

Baruch-Mordo, S., J. S. Evans, J. P. Severson, D. E. Naugle, J. D. Maestas, J. M. Kiesecker, M. J. Falkowski, et al. 2013. "Saving sage-grouse from trees: A proactive solution to reducing a key threat to a candidate species." *Biological Conservation* 167: 233-241.

BLM GIS. 2015. BLM GIS Data.

Chambers, J., R. F. Miller, D.I. Board, D. Pyke, B. A. Roundy, J. B. Grace, E. W. Schupp, and R. J Tausch. 2014. "Resilience and resistance of sagebrush ecosystems: Implications for state and transition models and management treatments." *Rangeland Ecology and Management* 67:440-454.

Connelly, J. W., M. A. Schroeder, A. R. Sands, and C. E. Braun. 2000. "Guidelines to manage sage-grouse populations and their habitats." *Wildlife Society Bulletin* 28(4):967-985.

Connelly, J. W., K. P. Reese, and M. A. Schroeder. 2003. Monitoring of Greater Sage-Grouse Habitats and Populations. University of Idaho College of Natural Resources Experiment Station Bulletin, Bulletin 80. University of Idaho, Moscow.

Connelly, J. W., S. T. Knick, M. A. Schroeder, and S. J. Stiver. 2004. Conservation Assessment of Greater Sage-grouse and Sagebrush Habitats. Western Association of Fish and Wildlife Agencies. Unpublished report. Cheyenne, Wyoming.

Doherty, K. 2008. Sage-grouse and Energy Development: Integrating Science with Conservation Planning to Reduce Impacts. University of Montana. Missoula, Montana.

Doherty, K. E., D. E. Naugle, and B. L. Walker. 2010. "Greater sage-grouse nesting habitat: The importance of managing at multiple scales." *Journal of Wildlife Management* 74:1544-1553.

Eiswerth, M. E., and J. S. Shonkiler. 2006. "Examining post-wildfire reseeding on arid rangeland: A multivariate tobit modeling approach." *Ecological Modeling* 192:286-298.

Holloran, M. J., and S. H. Anderson. 2005. "Spatial Distribution of greater sage-grouse nests in relatively contiguous sagebrush habitats." *Condor* 107:742-752.

Manier, D. J., Z. H. Bowen, M. L. Brooks, M. L. Casazza, P. S. Coates, P. A. Deibert, S. E. Hanser, and D. H. Johnson. 2014. Conservation buffer distance estimates for Greater Sage-Grouse—A review: US Geological Survey Open-File Report 2014-1239, 14 p. Internet website: <http://dx.doi.org/10.3133/ofr20141239>.

Miller, R. F., and J. A. Rose. 1999. "Fire history and western juniper encroachment in sagebrush steppe." *Journal of Range Management* 52:550-559.

Stevens, B. S., K. P. Reese, J. W. Connelly, and D. D. Musil. 2012. "Greater sage-grouse and fences: Does marking reduce collisions?" *Wildlife Society Bulletin* 36:297-303.

Stiver, S. J., E. T. Rinkes, D. E. Naugle, P. D. Makela, D. A. Nance, and J. W. Karl. 2015. In Press. Sage-Grouse Habitat Assessment Framework: A Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference 6710-1. US Bureau of Land Management, Denver, Colorado.

Tausch, R. J., R. F. Miller, B. A. Roundy, and J. C. Chambers. 2009. Piñon and Juniper Field Guide: Asking the Right Questions to Select Appropriate Management Actions. US Geological Survey Circular 1335.

USFWS (United States Department of the Interior, Fish and Wildlife Service). 2010. Endangered and Threatened Wildlife and Plants; 12-Month Findings for Petitions to List the Greater Sage-Grouse (*Centrocercus urophasianus*) as Threatened or Endangered: Washington, DC. FWS-R6-ES-2010-0018, FR 75, 55 (March 25, 2010).

_____. 2013. Greater Sage-Grouse (*Centrocercus urophasianus*) Conservation Objectives: Final Report. US Fish and Wildlife Service, Conservation Objectives Team, Denver, Colorado. February 2013.

_____. 2014. Memorandum: Greater Sage-Grouse: Additional Recommendations to Refine Land Use Allocations in Highly Important Landscapes. October 27, 2014.

Utah Greater Sage-Grouse Working Group. 2013. 2013 Conservation Plan for Greater Sage-grouse in Utah. February 14, 2013. Internet website: http://wildlife.utah.gov/uplandgame/sage-grouse/pdf/greater_sage_grouse_plan.pdf.